

EASY SHAKER™

WATER-IN-OIL [WIO]

BASE NUMBER [BN]

VISCOSITY [ALUVis]

SALT-IN-OIL [SAWOIL]



| | |
|---------------------------------------|-----------|
| Introduction | 4 |
| EasyShaker™ Test Device | 6 |
| Overview & Components | 6 |
| First Start-Up | 12 |
| Change Batteries | 12 |
| Switching On & Off | 13 |
| Menu Navigation | 14 |
| Cleaning The Device | 16 |
| Water-in-Oil [WiO in V%] | 18 |
| Test Procedure WiO | 18 |
| Quick Guide WiO Testing | 19 |
| Base number [BN in mgKOH/g] | 20 |
| Record Reference Values | 20 |
| Test Procedure BN | 22 |
| Quick Guide BN Testing | 23 |
| AluVis [optional available] | 24 |
| Device Components | 24 |
| Test Procedure | 25 |
| Spot Test [optional available] | 26 |
| Test Procedure | 26 |
| SaWOIL Test [Salt-In-Oil] | 28 |
| Components | 28 |
| Test Procedure | 28 |
| Troubleshooting | 30 |
| General | 30 |
| Water-in-Oil | 31 |
| Base number | 31 |
| MSDS | 32 |
| BN Reagent | 32 |
| Test Kit Cleaner | 42 |
| WiO Solvent | 53 |
| WiO Reagent Jelly | 64 |
| SaWOIL Reagent | 74 |
| SaWOIL Reagent Stick | 84 |
| Declaration of conformity | 94 |
| EU declaration of conformity | 94 |
| Disposal | 95 |
| Technical Data | 96 |

INTRODUCTION

This guidance does not claim to clarify everything in detail. This data can be viewed in the document "EasyShaker™ Handbook".

The purpose of this document is:

1. To provide everything that is important for testing
2. To provide a quick workaround for small errors

The individual components are described on the following pages. To avoid misunderstandings, it is important to follow the nomenclature for all topics.

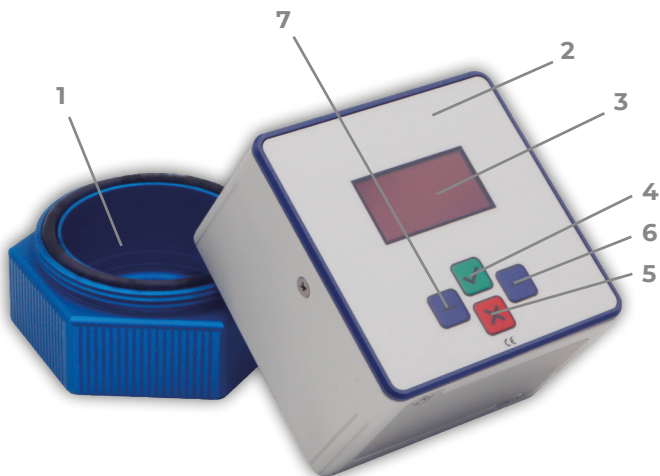




EASYSHAKER™ TEST DEVICE

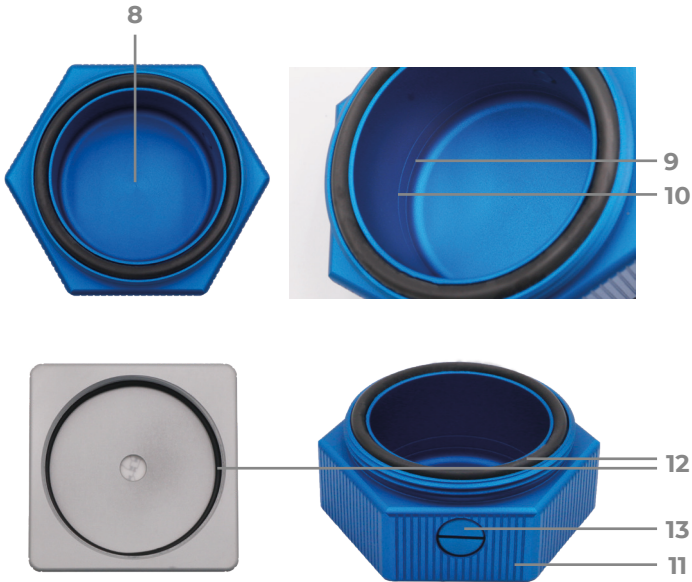
Overview & Components

Bottom & Head



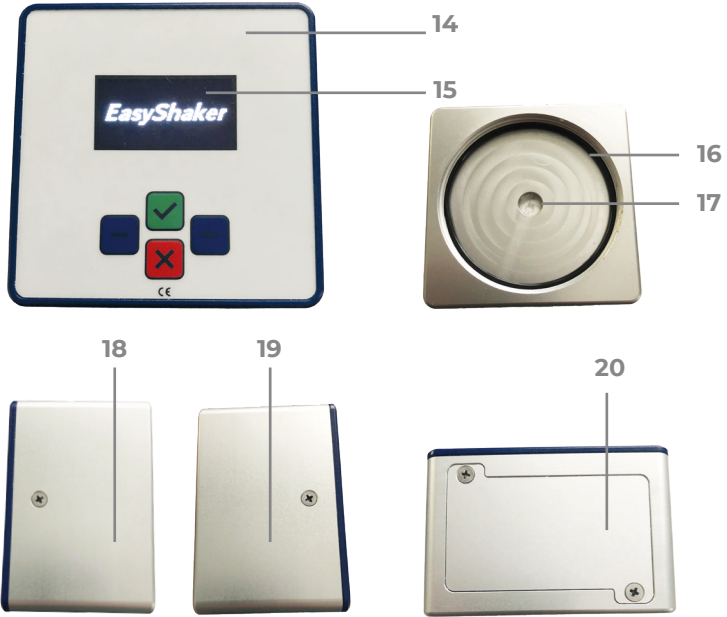
| No. | Component |
|-----|---|
| 1 | Bottom part with reaction chamber |
| 2 | Functional unit/"head part" with pressure sensor, input buttons and display |
| 3 | Display |
| 4 | On-/Save-/Confirmation button |
| 5 | Off-/Back-/Cancel button |
| 6 | Cursor Button to the right or entry of smaller values |
| 7 | Cursor Button to the left or enter larger values |

Bottom Part – View On Top



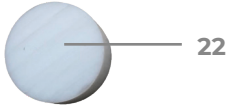
| No. | Component |
|-----|--|
| 8 | Reaction chamber |
| 9 | 1 st inner marker [~10ml] |
| 10 | 2 nd inner marker [~20ml] |
| 11 | Ribbed surface |
| 12 | Bottom seal |
| 13 | Emergency venting. To be used only in case of overpressure due to incorrect use. |

Head Part – View On Top



| No. | Component |
|-----|---|
| 14 | Front plate |
| 15 | Display incl. start screen "EasyShaker™" |
| 16 | Inner sealing ring head part |
| 17 | Ceramic surface pressure sensor |
| 18 | Right side incl. service screw |
| 19 | Left side incl. service screw |
| 20 | Battery cover incl. 2-fold screw connection |

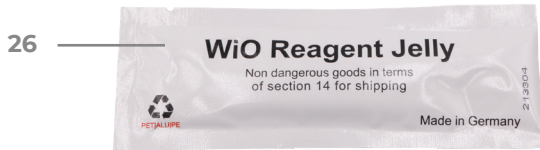
Accessoires



| No. | Component |
|-----|----------------|
| 21 | 50 ml Beaker |
| 22 | Agitator/Mixer |
| 23 | 5 ml Syringe |



| No. | Component |
|-----|-------------|
| 24 | BN Reagent |
| 25 | WiO Reagent |



| No. | Component |
|-----|--|
| 26 | WiO Reagent Jelly |
| 27 | Sprayer / Cleaner [available separately; in a case] |

First Start-Up

- 1** Unscrew the battery cover
- 2** Remove the battery discharge protector
- 3** Screw the battery cover back on
- 4** The unit will now start automatically
- 5** Select "Settings" with the blue cursor button and confirm with the green confirmation button
- 6** Select "Set Cylinders" and type in the number of cylinders of your machine. Default = 12
- 7** Confirm 2x
- 8** Select "Set Time" and enter the current time
- 9** Confirm
- 10** Select "Set Date" and enter the current date
- 11** Confirm

Change Batteries

- 1** Unscrew the battery cover
- 2** Remove batteries
- 3** Insert new batteries
- 4** Screw the battery cover back on
- 5** The unit will now start automatically

Switching On & Off

ON:
Press the green
button



OFF:
Press & hold the red
button for 3 seconds,



*The unit switches off
automatically after 10 minutes
without input.



Menu navigation

Settings

| Name | Description |
|-----------------|---|
| Set USER level | Selection from the different password protected user levels. |
| BN Settings | To check/create/manage the BN references. Under „Set Bn meas. time“ the methodology can also be adjusted with a known password. |
| Set Cylinders | Number of cylinders of your machine. Is needed to assign the measured values correctly. |
| WiO Settings | Password protected area to adjust the measuring time and the WiO-basic calibration function. |
| Set time | Time setting. |
| Set date | Date setting. |
| Sensor settings | Password protected area for sensor calibration. |

Test BN

| Name | Description |
|-------------------|--|
| Slot 1 – 7 | Selection of the reference oil to determine the TBN/BN of your used oil. |
| Select meas. Type | Selection of the sample source [from which cylinder]. |
| BN measurement | Summary of the amount of reagent and sample. |

Test WiO

| Name | Description |
|------------------|--|
| Select WiO Range | Selection of the measuring range. The smallest possible measuring range is always the most accurate. |
| WiO Measurement | Summary of the amount of reagent, agitator and sample. |

Read results

| Name | Description |
|-------------------|--|
| Select meas. Type | Preselection of the sample source from which the results are to be read. |
| Result 1/... | Display of the measurement results Start with the most current value. |



Cleaning the device

Please note the following instructions in detail:

- ! After each measurement procedure from BN to WiO and vice versa, the device should be cleaned thoroughly. BN reagent reacts with WiO reagent and will otherwise lead to incorrect measurements.
- ! The outer sealing ring should generally be wiped with an absorbent cloth after each measurement and freed from reagent/sample residues.
- ! Our Test Kit Cleaner is approved as a cleaning agent. So-called "Cold cleaners" are also generally suitable. If you are unsure, especially with regard to resistance, ask your distributor!





Test Procedure WiO

- 1** Start the device by pushing the green button.
- 2** Select "Test WiO" by using a blue button and confirm with the green button.
- 3** Select the measuring range with the blue button and confirm your selection with the green button.
- 4** Open the device and place the bottom part in front of you.
- 5** Add 20 ml of WiO solvent by using the 50 ml Beaker and/or fill up to the 2nd inner marker of the reaction chamber. See page 7.
- 6** To rinse the syringe, fill and empty it 2 – 3 times with the Oil sample. Use the 5 ml syringe for this.
- 7** Fill 5/3/2/1 ml of your oil sample according to your measuring range. The Volume will be displayed.
- 8** Transfer a portion of the reagent paste. You do not need to be too precise.
- 9** Add 1x mixer/agitator [plastic slice] into the reaction chamber.
- 10** Place the head part on the bottom part and carefully screw the head part onto the bottom part with approx. 2 – 3 turns.
- 11** Lift both parts and screw them tight. Then start the test by pushing the green button.
- 12** Hold the device in both hands and shake initially approx. 5 s powerfully.
- 13** Shake back and forth as constantly as possible until the timer has run out [after 2 minutes]. Small Hint: Best results are achieved if you shake to the left or right from time to time.
- 14** The result can be read on the display.

Quick Guide WiO Testing

Select measuring range

- 1** 0.03 – 1.2 V%
- 2** 0.03 – 2.5 V%
- 3** 0.03 – 5.0 V%
- 4** 0.03 – 10.0 V%

Open the device and fill up to the second marker with the WiO Solvent [approx. 20 ml].

Range 1

Add 5 ml of your sample.

Range 2

Add 3 ml of your sample.

Range 3

Add 2 ml of your sample.

Range 4

Add 1 ml of your sample.

Add: 1x sachet WiO Reagent Jelly + 1x Agigator.

Close the test unit completely and press OK to start the test.

Hold the test unit with both hands and shake powerfully for about 5 seconds + constantly for 2 minutes.

The result is shown on the display.

BASE NUMBER [BN IN MGKOH/G]

Record BN reference values

- 1 Start the device by pushing the green button.
- 2 Select "Settings" by using a blue button and confirm with the green button.
- 3 Select "BN Settings" with the blue button and confirm your selection with the green button.
- 4 Select "Edit BN ref. list" with the blue button and confirm your selection with the green button.
- 5 Select "Vacant slot 1 – 7" to create a new reference or select an existing one to edit it.
- 6
 - a Select "Read reference" to read an existing reference oil.
 - b Select "Add manually" to enter a known reference pressure value [in Pa].
 - c Select "Delete" to delete an existing reference pressure value.
 - d Select "Add through test" to determine the reference pressure of a lubricating oil sample by means of a 3-fold determination.
The average value is automatically saved.

Please note: The following instructions are based on "Add through test"

- 7 Open the device and place the bottom part in front of you.
- 8 Add 10 ml of BN Reagent by using the 50 ml Beaker and/or fill up to the 1st inner marker².
- 9 To rinse the syringe, fill and empty it 2 – 3 times with the Oil sample. Use the 5ml syringe for this.
- 10 Fill 3 ml of your oil sample into the reaction chamber. The Volume will be displayed.

¹Reference List is only available by orders in advance | ²Accuracy is significantly improved when using the beaker

- 11** Place the head part on the bottom part and carefully screw the head part onto the bottom part with approx. 2 – 3 turns.
- 12** Lift both parts and screw them tight.
- 13** Start the test by pushing the green button.
- 14** Hold the device in both hands and shake initially approx. 5 seconds powerfully.
- 15** Shake back and forth as constantly as possible until the timer has run out [after 1 minutes].
Small Hint: Best results are achieved if you shake to the left or right from time to time.
- 16** The result can be read on the display.
- 17** Clean the device especially the reaction chamber and the inner head part.
- 18** Repeat steps 6-15 2 times to obtain the average value of the 3-fold determination.
- 19** Confirm the calculated mean value with green. Note: The individual results should not differ from each other by more than 20 %.
- 20** Select the number in the upper field and change it according to the fresh oil specification, e.g. BN0700TH*. Confirm with OK according to the display and then press the green button on the keypad.
- 21** The new reference value is stored/saved.

Test Procedure BN

- 1** Start the device by pushing the green button.
- 2** Select "Test BN" by using a blue button and confirm with the green button.
- 3** Select your BN Reference Slot of your choice with the blue button and confirm your selection with the green button.
- 4** Select your meas. Type [source of your sample] f. ex. BN Cyl. 6.
- 5** Open the device and place the bottom part in front of you.
- 6** Add 10 ml of BN Reagent by using the 50 ml Beaker and/or fill up to the 1st inner marker into the reaction chamber. See page 7.
- 7** To rinse the syringe, fill and empty it 2 – 3 times with the Oil sample. Use the 5ml syringe for this.
- 8** Fill 5 ml of your oil sample into the reaction chamber.
- 9** Place the head part on the bottom part and carefully screw the head part onto the bottom part with approx. 2 – 3 turns.
- 10** Lift both parts and screw them tight.
- 11** Start testing by pushing the green button.
- 12** Hold the device in both hands and shake initially approx. 5 seconds powerfully.
- 13** Shake back and forth as constantly as possible until the timer has run out [after 1 minute]. Small Hint: Best results are achieved if you shake to the left or right from time to time.
- 14** The result can be read on the display.

Quick Guide BN Testing

Select reference

Slot: OIL 1 – 7*

Slot 1 – 7.

Unscrew the test unit. Then fill up to the first marker with BN Reagent [10 ml].

Add 5 ml of your sample.

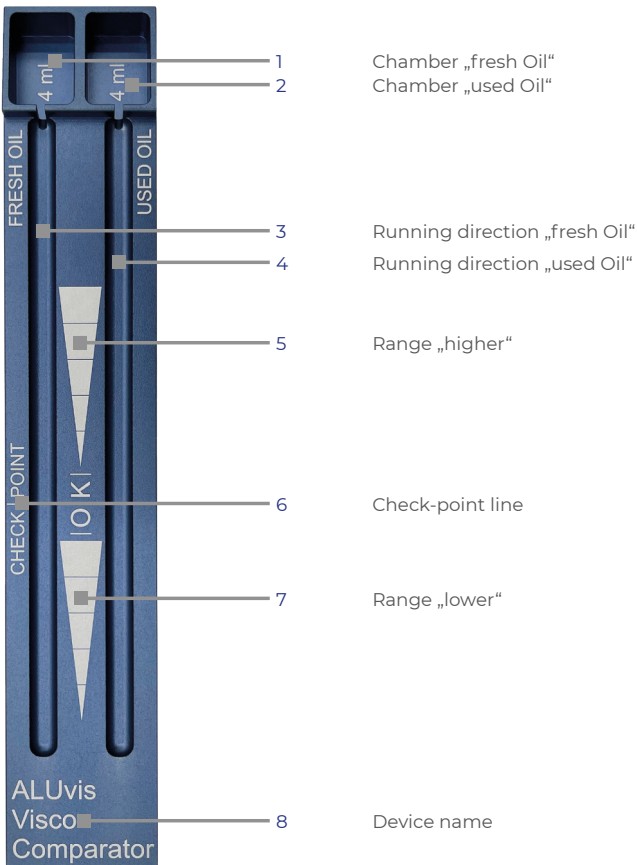
Close the device unit completely and press OK to start the test.

Hold the device with both hands and shake powerfully for about 5 s + constantly for 55 s.

The result is shown on the display.

*Reference oils can be set via settings → Edit BN ref. list → Vacant slot 1 – 7

Device Components



Test Procedure

Viscosity Comparator for used/fresh oil

1. Fill the chamber labelled "Fresh Oil" [longitudinal label] with 4 ml of fresh lubricating oil.
2. Fill the chamber labelled "Used Oil" [longitudinal label] with 4 ml of used oil sample.
3. Press the rocker down [Press on AluVis] so that the oil samples „flow“ = „Inclined position“.
4. When the fresh oil reaches the "Check | Point" line, stop and let the rocker fall back to the horizontal position.
5. Compare how far your used oil has flowed using the middle scale.

Evaluate the results:

- a. Is it between the | OK | All is well!
- b. If it is in the range "higher" than | OK | the viscosity is higher than the fresh oil.
- c. If it is in the range "lower" than | OK | the viscosity is lower than the fresh oil.

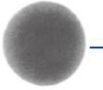

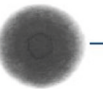
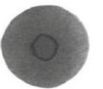
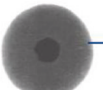
SPOT TEST [OPTIONAL AVAILABLE]

Test Procedure

1. Take your Spot Test paper according to the specification / number of samples.
2. Heat the sample according to the test procedure and specification¹.
3. Mix samples according to your test specification².
4. Drop one drop onto the middle of the Spot Test papers.
5. Let the Spot Test paper dry. According to ASTM D4740 at 98-102 °C in a closed oven for 1 h.
6. Compare your sample with the image on the right.

¹ we recommend to heat the samples for at least 20 minutes at 80-100°C degrees.

² we recommend min. 1x 50/50 + 1x 20/80 + 1x 60/40 ratio of the 2 substances to be mixed.

| Rating ASTM D4740 | Reference Spot | Spot Description | Fuel Status |
|----------------------|---|--|--|
| 1 |  | Homogeneous spot, no inner ring | Compatible / Stable |
| 2 |  | Faint or poorly defined inner ring | Will deposit some sludge Handle carefully Consider chemical additives Do not overheat Increase purifier Blow down frequency |
| 3 |  | Well-defined inner ring, only slightly darker than the background | As for 2 but increased sludge potential |
| 4 |  | Well-defined inner ring, thicker than the ring in reference spot no. 3 and somewhat darker than the background | Incompatible / Unstable |
| 5 |  | Very dark solid or nearly solid area in the center, the central area is much darker than the background | Incompatible / Unstable |

SAWOIL TEST [SALT-IN-OIL]

Components

| | |
|----|------------------------------|
| 27 | 50 ml Tube |
| 28 | 50 ml Beaker |
| 29 | 5 ml Pipette |
| 30 | SaWOil 200 ml Reagent Bottle |
| 31 | SaWOil Reagent Stick |

Test Procedure

1. Have the following items ready: 50 ml tube, 50 ml beaker, SaWOil Reagent Bottle, SaWOil test strip can, your sample and 5 ml Pasteur pipette.
2. Fill the 50 ml tube with 40 ml oil sample.
3. Add 10 ml of SaWOil Reagent in the same tube. Total fill level = 50 ml.
4. Close the 50 ml tube with the cap.
5. Shake vigorously for approx. 1 minute. Then let the mixture rest for 30 min.

6. Transfer 10 ml of the lower aqueous phase from the 50 ml tube into the beaker [50 ml] by using the pateur pipette 2-3 times, rinse pipette several times in aqueous phase so that no oil is taken along.
7. Take a sawoil-Stick and place it slightly diagonally with the yellow line upwards in the 50 ml beaker with the aqueous solution.
8. Wait for 4 min [reaction time].

EVALUATION

SALT: Result Positive = SALT in the solution



NO SALT: Result Negative = NO SALT in the solution



TROUBLESHOOTING

General

| Description/ name of the error | Possible source of error | Possible solutions |
|---|--|--|
| Leakage | Sealing ring dirty Sealing ring punctured/ broken. | Remove the upper and lower sealing ring. Inspect them for possible faults. If no fault is found, clean, dry and replace. |
| EasyShaker™ can no longer be opened | EasyShaker™ was not opened directly after the measurement. This could result in a pressure > 1Bar. | Lowly open the drain screw. See page 7. Then clean and dry the screw and seal. Then close tightly with the screw and seal. CAUTION FOR EMER- GENCIES ONLY. SPLASH HAZARD. |
| EasyShaker™ can no longer be switched On/Off | Batteries are empty. | Replace the batteries with new and/or charged batteries. |
| I can't find my results? | Please note: The storage capacity turnover 100 measured values. After that the measured values are always overwritten/ deleted starting from the oldest. | Select "Read results". Select the relevant sample source. For Example BN Cyl. 4. The results will be displayed. |

Water-in-Oil

| Description/ name of the error | Possible source of error | Possible solutions |
|-----------------------------------|--|--|
| My results are too high! | BN reagents react strongly with WiO reagents. | Clean and dry the device. |
| My results are too low! | The device leaks because the sealing rings were damaged and not completely cleaned of WiO paste. | New calibration of your reference oil. |

Base number

| Description/ name of the error | Possible source of error | Possible solutions |
|-----------------------------------|---------------------------------|--|
| My results are too high! | BN Reference value is too low. | New calibration of your reference oil. |
| My results are too low! | BN Reference value is too high. | New calibration of your reference oil. |

BN Reagent



SAFETY DATA SHEET

BN Reagent [500ml]

Revision date 21-Jul-2021

Revision Number 1

1. IdentificationProduct identifier

Product Name BN Reagent [500ml]

Other means of identification

Product Code(s) WIDMAR-BNREAG

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Lubricant analysis

Restrictions on use Others

Details of the supplier of the safety data sheet**Supplier Address**

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

Manufacturer

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Deutschland
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

Emergency telephone number

Emergency Telephone Poison Control Center Munich
Tel.: +49 (0) 89 19 24 0
Germany
24 hours service
Languages: German, English

2. Hazard(s) identificationClassification

| | |
|-----------------------------------|---------------------------|
| Acute toxicity - Oral | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Harmful if swallowed

Causes severe skin burns and eye damage

**Appearance** aqueous solution**Physical state** Liquid**Odor** Pungent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dusts or mists

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor

Specific treatment (see ? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

No information available.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Trade secret |
|-----------------|----------|----------|--------------|
| Ethylene glycol | 107-21-1 | 30-60 | * |
| Acetic acid | 64-19-7 | 1-8 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8). |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--------------------|
| Symptoms | Burning sensation. |
|-----------------|--------------------|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. |
|---------------------------|--|

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

| | |
|-----------------------------|---|
| Personal precautions | Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| | |
|--------------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. Handling and storage**Precautions for safe handling**

| | |
|--------------------------------|--|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. |
|--------------------------------|--|

Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|--|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store locked up. Store away from other materials. |
|---------------------------|--|

8. Exposure controls/personal protection**Control parameters****Exposure Limits**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|-----------------------------|--|--|--|
| Ethylene glycol 107-21-1 | STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction | (vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³ | - |
| Acetic acid 64-19-7 | STEL: 15 ppm TWA: 10 ppm | TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³ | IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³ |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

| | |
|-----------------------------|---|
| Engineering controls | Showers Eyewash stations Ventilation systems. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/face protection | Tight sealing safety goggles. Face protection shield. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | aqueous solution |
| Color | colorless |
| Odor | Pungent |
| Odor threshold | No information available |

| Property | Values | Remarks • Method |
|---|-------------------|-------------------------|
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Relative vapor density | No data available | None known |
| Relative density | No data available | None known |
| Water solubility | No data available | None known |
| Solubility (ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|------------------------------------|---|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Exposure to air or moisture over prolonged periods. |
| Incompatible materials | Acids. Bases. Oxidizing agent. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|--------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes. |
| Skin contact | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. |
| Ingestion | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|----------|---|
| Symptoms | Redness. Burning. May cause blindness. Coughing and/ or wheezing. |
|----------|---|

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-------------------------------|----------------|
| ATEMIX (oral) | 895.80 mg/kg |
| ATEMIX (dermal) | 8,180.30 mg/kg |
| ATEMIX (inhalation-dust/mist) | 152.000 mg/l |

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------------|----------------------|-------------------------|-------------------------|
| Ethylene glycol 107-21-1 | = 4700 mg/kg (Rat) | = 10600 mg/kg (Rat) | - |
| Acetic acid 64-19-7 | = 3310 mg/kg (Rat) | = 1060 mg/kg (Rabbit) | = 11.4 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | Classification based on data available for ingredients. Causes burns. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Target organ effects | Respiratory system, Eyes, Skin, Central nervous system, Teeth. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information**Ecotoxicity**

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------------------|---|---|----------------------------|--|
| Ethylene glycol 107-21-1 | EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: =41000mg/L (96h, Oncorhynchus mykiss) | - | EC50: =46300mg/L (48h, Daphnia magna) |
| Acetic acid 64-19-7 | - | LC50: =75mg/L (96h, Lepomis macrochirus) LC50: =79mg/L (96h, Pimephales promelas) | - | EC50: =65mg/L (48h, Daphnia magna) |

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|-----------------------------|-----------------------|
| Ethylene glycol 107-21-1 | -1.93 |
| Acetic acid 64-19-7 | -0.31 |

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated
Technical Name

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

| Chemical name | CAS No | US TSCA Inventory listing | US TSCA inactive/active designation |
|-----------------|-----------|---------------------------|-------------------------------------|
| Ethylene glycol | 107-21-1 | Present | Active |
| Water | 7732-18-5 | Present | Active |

| Chemical name | CAS No | US TSCA Inventory listing | US TSCA inactive/active designation |
|---|-----------|---------------------------|-------------------------------------|
| Polyoxyethylene sorbitan monolaurate | 9005-64-5 | Present | Active |
| Acetic acid | 64-19-7 | Present | Active |
| Phosphoric acid, tris(2-methylpropyl) ester | 126-71-6 | Present | Active |
| Sodium lauryl sulfate | 151-21-3 | Present | Active |

| | |
|---------------|----------|
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECS | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECS - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|----------------------------|-------------------------------|
| Ethylene glycol - 107-21-1 | 1.0 |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Acetic acid 64-19-7 | 5000 lb | - | - | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ) |
|-----------------------------|--------------------------|------------------------------------|--|
| Ethylene glycol 107-21-1 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| Acetic acid 64-19-7 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical name | California Proposition 65 |
|----------------------------|---------------------------|
| Ethylene glycol - 107-21-1 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| Ethylene glycol 107-21-1 | X | X | X |
| Water 7732-18-5 | - | - | X |
| Acetic acid 64-19-7 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|-------------|------------------|----------------|--------------------|-----------------------|
| NFPA | Health hazards 3 | Flammability 0 | Instability 0 | Special hazards - |
| HMIS | Health hazards 3 | Flammability 0 | Physical hazards 0 | Personal protection X |

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 21-Jul-2021
Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

End of Safety Data Sheet

Test-Kit-Cleaner



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Test-Kit-Cleaner

Revision date 06-29-2022

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|---------------------------------|---|
| Product Code(s) | WIDmarTestKitCleaner |
| Product Name | Test-Kit-Cleaner |
| EC No | 265-149-8 |
| CAS No | 64742-47-8 |
| Unique Formula Identifier (UFI) | 1Q30-4WT6-T225-0RW1 |
| Synonyms | Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics |
| Pure substance/mixture | Substance Contains Petroleum distillates, hydrotreated light |
| Formula | Combination of mainly C _n H _{2n+2} and C _n H _{2n} structures, comprised mainly within a carbon number range from C13 to C15 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|----------------------|------------------|
| Recommended use | Degreasing agent |
| Uses advised against | Others |

1.3. Details of the supplier of the safety data sheet

Supplier

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

| | |
|---------------------|---|
| Emergency Telephone | Poison Control Centre Munich Tel.: +49 (0) 89 19 24 0 Germany 24 hours service Languages: German, English |
|---------------------|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

| | |
|-------------------------|---------------------|
| Aspiration hazard | Category 1 - (H304) |
| Acute toxicity - Dermal | Category 4 - (H312) |

2.2. Label elements

265-149-8

Contains Petroleum distillates, hydrotreated light



Signal word
Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves and protective clothing
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P312 - Call a POISON CENTER or doctor if you feel unwell
P321 - Specific treatment (see supplemental first aid instructions on this label)
P331 - Do NOT induce vomiting
P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Chemical name | Weight-% | REACH registration number | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|----------|---------------------------|-----------|---|------------------------------------|----------|----------------------|
| Petroleum distillates, hydrotreated light 64742-47-8 | 100 | No data available | 265-149-8 | Asp. Tox. 1 (H304) | | | |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE_{mix}) for classifying a mixture based on its components

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|-----------------|-------------------|---|--|--------------------------------------|
| Petroleum distillates, hydrotreated light | 5000 | 2000 | | | |

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---------------|--------------------|----------------------|--|---|---|
| 64742-47-8 | | | | | |

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a doctor. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. |
|-----------------|--|

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|------------------------|---|
| Note to doctors | Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances. |
|------------------------|---|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|-------------------------------------|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-------------------------------------|---|

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

| | |
|---------------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|---------------------------------------|---|

5.2. Special hazards arising from the substance or mixture

| | |
|---|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|---|---------------------------|

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

| Chemical name | France | Germany | Germany MAK | Greece | Hungary |
|---------------|--------|---------|-------------|--------|---------|
|---------------|--------|---------|-------------|--------|---------|

| | | | | | |
|--|---------------|---|---|-----------------------|---|
| Petroleum distillates, hydrotreated light 64742-47-8 | - | TWA: | TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Peak: 20 mg/m ³ Peak: 100 ppm Peak: 700 mg/m ³ | - | - |
| Chemical name | Sweden | Switzerland | | United Kingdom | |
| Petroleum distillates, hydrotreated light 64742-47-8 | - | TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ STEL: 100 ppm STEL: 700 mg/m ³ | | - | |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Personal protective equipment**

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | | |
|---|----------------------------------|-------------------------|
| Physical state | Liquid | |
| Appearance | Liquid | |
| Colour | colourless | |
| Odour | Aromatic, Petroleum distillates. | |
| Odour threshold | No information available | |
| Property | Values | Remarks - Method |
| Melting point / freezing point | < -30 °C | None known |
| Boiling point / boiling range | 238-257 °C | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | 105 °C | None known |
| Autoignition temperature | No data available | None known |

| | | |
|----------------------------|--------------------------|--------------------------|
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | 3.2 mm ² /s | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapour pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | None known |
| Liquid Density | 0.79 g/cm ³ | |
| Relative vapour density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information**9.2.1. Information with regards to physical hazard classes**

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure**

Product Information

| | |
|--------------|--|
| Inhalation | Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. May cause irritation. |
| Skin contact | Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------------------|------------------------|
| Petroleum distillates, hydrotreated light | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitisation | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|----------------------|--|----------------------------|-----------|
| Petroleum distillates, hydrotreated light | - | LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss) LC50: =45mg/L (96h, Pimephales promelas) | - | - |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

| Chemical name | PBT and vPvB assessment |
|---|---------------------------------|
| Petroleum distillates, hydrotreated light | The substance is not PBT / vPvB |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information**IATA**

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user Special Provisions | None |

IMDG

| | |
|---|-------------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special precautions for user Special Provisions | None No information available |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user Special Provisions | None |

ADR

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

| Chemical name | French RG number | Title |
|---|------------------|-------|
| Petroleum distillates, hydrotreated light 64742-47-8 | RG 84 | - |

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This

product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

International Inventories

| | |
|---------------|-----------------|
| TSCA | Complies |
| DSL/NDL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
 H304 - May be fatal if swallowed and enters airways

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |

| | |
|---------------------------|--------------------|
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 06-29-2022

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

WiO Solvent

Revision date 11-29-2021

Revision Number 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|---------------------------------|---|
| Product Code(s) | WIDmarWIOSolv |
| Product Name | WiO Solvent |
| EC No | 265-149-8 |
| CAS No | 64742-47-8 |
| Unique Formula Identifier (UFI) | 1Q30-4WT6-T225-0RW1 |
| Synonyms | Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics |
| Pure substance/mixture | Substance Contains Petroleum distillates, hydrotreated light |
| Formula | Combination of mainly C _n H _{2n+2} and C _n H _{2n} structures, comprised mainly within a carbon number range from C13 to C15 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|----------------------|------------------|
| Recommended use | Degreasing agent |
| Uses advised against | Others |

1.3. Details of the supplier of the safety data sheet

Supplier

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

| | |
|---------------------|---|
| Emergency Telephone | Poison Control Centre Munich Tel.: +49 (0) 89 19 24 0 Germany 24 hours service Languages: German, English |
|---------------------|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|-------------------------|---------------------|
| Aspiration hazard | Category 1 - (H304) |
| Acute toxicity - Dermal | Category 4 - (H312) |

2.2. Label elements

265-149-8

Contains Petroleum distillates, hydrotreated light



Signal word
Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves and protective clothing
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P312 - Call a POISON CENTER or doctor if you feel unwell
P321 - Specific treatment (see supplemental first aid instructions on this label)
P331 - Do NOT induce vomiting
P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Chemical name | Weight-% | REACH registration number | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|----------|---------------------------|-----------|---|------------------------------------|----------|----------------------|
| Petroleum distillates, hydrotreated light 64742-47-8 | 100 | No data available | 265-149-8 | Asp. Tox. 1 (H304) | | | |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|-----------|-------------|---|--|--------------------------------------|
| Petroleum distillates, hydrotreated light | 5000 | 2000 | | | |

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---------------|-----------|-------------|---|--|--------------------------------------|
| 64742-47-8 | | | | | |

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a doctor. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. |
|-----------------|--|

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|------------------------|---|
| Note to doctors | Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances. |
|------------------------|---|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|-------------------------------------|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-------------------------------------|---|

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

| | |
|---------------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|---------------------------------------|---|

5.2. Special hazards arising from the substance or mixture

| | |
|---|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|---|---------------------------|

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

| Chemical name | France | Germany | Germany MAK | Greece | Hungary |
|---------------|--------|---------|-------------|--------|---------|
| | | | | | |

| | | | | | |
|--|---------------|---|---|---|---|
| Petroleum distillates, hydrotreated light 64742-47-8 | - | - | TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Peak: 20 mg/m ³ Peak: 100 ppm Peak: 700 mg/m ³ | - | - |
| Chemical name | Sweden | Switzerland | United Kingdom | | |
| Petroleum distillates, hydrotreated light 64742-47-8 | - | TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ STEL: 100 ppm STEL: 700 mg/m ³ | - | | |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Personal protective equipment**

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|------------------------|----------------------------------|
| Physical state | Liquid |
| Appearance | Liquid |
| Colour | colourless |
| Odour | Aromatic. Petroleum distillates. |
| Odour threshold | No information available |

| Property | Values | Remarks - Method |
|---|-------------------|-------------------------|
| Melting point / freezing point | < -30 °C | None known |
| Boiling point / boiling range | 238-257 °C | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | 105 °C | None known |
| Autoignition temperature | No data available | None known |

| | | |
|----------------------------|--------------------------|--------------------------|
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | 3.2 mm ² /s | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapour pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | None known |
| Liquid Density | 0.79 g/cm ³ | |
| Relative vapour density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. May cause irritation. |
| Skin contact | Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------------------|------------------------|
| Petroleum distillates, hydrotreated light | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitisation | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|----------------------|--|----------------------------|-----------|
| Petroleum distillates, hydrotreated light | - | LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss) LC50: =45mg/L (96h, Pimephales promelas) | - | - |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

| Chemical name | PBT and vPvB assessment |
|---|---------------------------------|
| Petroleum distillates, hydrotreated light | The substance is not PBT / vPvB |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information**IATA**

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

IMDG

| | |
|--|-------------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None No information available |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational illnesses (R-463-3, France)**

| Chemical name | French RG number | Title |
|--|------------------|-------|
| Petroleum distillates, hydrotreated light 64742-47-8 | RG 84 | - |

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This

product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|---------------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H304 - May be fatal if swallowed and enters airways

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Classification procedure

| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
|---|--------------------|
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |

| | |
|---------------------------|--------------------|
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 11-29-2021

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

WiO Reagent Jelly



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

WiO Reagent Jelly

Revision date 26-Mar-2024

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) WIDmarWiOJelly
Product Name WiO Reagent Jelly

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Consumer use

Uses advised against

1.3. Details of the supplier of the safety data sheet

Manufacturer
Water-i.d. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0)
721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

Supplier

1.4. Emergency telephone number

Emergency Telephone Poison Control Centre Munich
Tel.: +49 (0) 89 19 24 0
Germany
24 hours service
Languages: German, English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

2.2. Label elements

Hazard statements

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE_{mix}) for classifying a mixture based on its components

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

| | |
|----------------|--|
| General advice | IF exposed or concerned: Get medical advice/attention. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Rinse mouth. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

SECTION 5: Firefighting measures**5.1. Extinguishing media**

| | |
|------------------------------|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|------------------------------|---|

| | |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

| | |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.
 Predicted No Effect Concentration (PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Paste / Gel Liquid
 Appearance Paste
 Color colorless
 Odor Odorless.
 Odor threshold

| Property | Values | Remarks • Method |
|--|-------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapor pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapor density | No data available | None known |
| Particle characteristics | | |
| Particle Size | | |

Particle Size Distribution

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-----------------|----------------|
| ATEmix (oral) | 5,000.00 mg/kg |
| ATEmix (dermal) | 3,687.60 mg/kg |

- 95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 2.375 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties

11.2.2. Other information

Other adverse effects

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

12.6. Endocrine disrupting properties

Endocrine disrupting properties

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

| | |
|-------------------------------------|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
|-------------------------------------|---|

| | |
|------------------------|--------------------------------|
| Contaminated packaging | Do not reuse empty containers. |
|------------------------|--------------------------------|

SECTION 14: Transport information**IATA**

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user Special Provisions | None |

IMDG

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special precautions for user Special Provisions | None |
| 14.7 Maritime transport in bulk according to IMO instruments | |

RID

| | |
|-----------------------------|---------------|
| 14.1 UN number or ID number | Not regulated |
|-----------------------------|---------------|

| | |
|-----------------------------------|----------------|
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|---------------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICCS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
 Ceiling Maximum limit value * Skin designation

| Classification procedure | Method Used |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitization | Calculation method |
| Skin sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 26-Mar-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SaWOIL Reagent



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

SaWOIL Reagent

Revision date 04-17-2023

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) WIDMARSawOIL

Product Name SaWOIL Reagent

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Lubricant analysis

Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Manufacturer

Water-i.d. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

Emergency Telephone Poison Control Centre Munich
Tel.: +49 (0) 89 19 24 0
Germany
24 hours service
Languages: German, English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

EUH208 - Contains 3(2H)-Isothiazolone, 2-methyl- May produce an allergic reaction.

EUH210 - Safety data sheet available on request

EUH071 - Corrosive to the respiratory tract

2.3. Other hazards

Page 1 / 10

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|----------|---------------------------|-----------|--|------------------------------------|----------|----------------------|
| 3(2H)-Isothiazolone, 2-methyl-2682-20-4 | <0.001 | No data available | 220-239-6 | Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) (EUH071) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | Skin Sens. 1A :: C>=0.0015% | 10 | 1 |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|-----------------|-------------------|---|--|--------------------------------------|
| 3(2H)-Isothiazolone, 2-methyl-2682-20-4 | 232 120 | 200 | | | |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---|----------------|-----------------------------|---|----------------|---------|
| 3(2H)-Isothiazolone, 2-methyl-2682-20-4 | - | TWA: 0.05 mg/m ³ | - | - | - |
| Chemical name | France | Germany | Germany MAK | Greece | Hungary |
| 3(2H)-Isothiazolone, 2-methyl-2682-20-4 | - | - | TWA: 0.2 mg/m ³ Peak: 0.4 mg/m ³ | - | - |
| Chemical name | Sweden | | Switzerland | United Kingdom | |
| 3(2H)-Isothiazolone, 2-methyl-2682-20-4 | - | | TWA: 0.2 mg/m ³ STEL: 0.4 mg/m ³ | - | |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Personal protective equipment**

Eyeface protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|-----------------|--------------------------|
| Physical state | Liquid |
| Appearance | Liquid |
| Colour | colourless |
| Odour | Odourless. |
| Odour threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|--------------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | = 7.0 | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapour pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapour density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

| | |
|--------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity**Acute toxicity****Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|--|------------------------|-------------------------|
| 3(2H)-Isothiazolone, 2-methyl- | 232 - 249 mg/kg (Rat) = 120 mg/kg (Rat) | = 200 mg/kg (Rabbit) | = 0.11 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|--------------------------------|-----------------------|
| 3(2H)-Isothiazolone, 2-methyl- | -0.26 |
| | -0.34 |
| | -0.28 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------------|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

SECTION 14: Transport information**IATA**

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

IMDG

| | |
|--|-------------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None No information available |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Does not comply |
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Does not comply |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

EUH071 - Corrosive to the respiratory tract
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Classification procedure

| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
|---|--------------------|
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 04-17-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Sawoil Reagent Stick

Revision date 08-12-2024

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) SAWOIL-Stick
Product Name Sawoil Reagent Stick

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Reagent for water analysis
Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

Emergency Telephone

| | |
|--------|--|
| Europe | +44 1235 239670 English, Albanian, Bosnian, Bulgarian, Croatian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Turkish and Ukrainian. |
|--------|--|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances****3.2 Mixtures**

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical nature Test strip.

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

| | |
|---------------------|---|
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Rinse mouth. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.
 Predicted No Effect Concentration (PNEC)

9.2. Exposure controls

Personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid
 Appearance Paper
 Colour red brown
 Odour Odourless.
 Odour threshold

| Property | Values | Remarks • Method |
|--|-------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapour pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapour density | No data available | None known |
| Particle characteristics | | |
| Particle Size | | |
| Particle Size Distribution | | |

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

No information available

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 3,333.30 mg/kg

98 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 99.2 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 99.2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
 99.2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
 99.2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties

11.2.2. Other information

Other adverse effects

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
 14.2 Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
 14.2 Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Marine pollutant Not applicable
 14.6 Special precautions for user
 Special Provisions None
 14.7 Maritime transport in bulk according to IMO instruments

RID

14.1 UN number or ID number Not regulated
 14.2 Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|---------------|-----------------|
| TSCA | Complies |
| DSL/NDL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
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 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend**

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
 Ceiling Maximum limit value *

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMED database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 08-12-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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DECLARATION OF CONFORMITY

EU declaration of conformity

The manufacturer / distributor

Water-i.d. GmbH
Daimlerstraße 20
76344 Eggenstein-Leopoldshafen



hereby declares that the following product

Product name: Mobile measuring system for water content in oil (WiO) and base number (BN)
Trade name: EasyShaker
Model name: EasyShaker
Product number: WIDmar-EasyShaker

complies with the provisions of the EMC Directive 2014/30/EU - including its amendments in force at the time of declaration.

The following national or international standards (or part/clauses thereof) and specifications have been applied:

EN 61326-1: 2013 Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements

The measurement procedure with the reagents is determined by Regulations (EC) No. 1272/2008.

The material safety data sheets for the proprietary products used:

- „Safety Data Sheet BN Reagent [500 ml], 11-29-2021, revision number 3“
- „Safety Data Sheet WiO Reagent Jelly, 11-29-2021, revision number 2“
- „Safety Data Sheet WiO Solvent, 11-29-2021, revision number 2“

have been prepared in accordance with the following requirements:

Regulations (EC) No. 1907/2006 and Regulations (EC) No. 1272/2008

Safe use can take place after successful participation in an expert examination.

Location: Eggenstein-Leopoldshafen

Date: 28.06.2023

Andreas Hock

Managing Director

Disposal

Disposal instructions according to
EU directive by the European Parliament and Council: 2012/19/EU
EU directive by the European Parliament and Council: 2006/66/EC

Environmental protection information

For the manufacture of your device, raw materials had to be produced and processed. The product may there contain hazardous substances with a negative effect on the environment if the device is not disposed of properly.

Disposal of the device inclusive batteries

EU directive 2006/66/EC prohibits the disposal of batteries through normal household waste because batteries and accumulators may contain hazardous substance dangerous for the groundwater quality.

The device purchased by you contains replaceable AA-batteries (Alkaline).

We are obliged by law to notify you that the batteries contained in the device must be disposed of properly at special collection points or with the dealer where you have purchased the device.

The symbol of the crossed-out waste bin indicates that you are asked to dispose of the device properly. To avoid that hazardous substances do enter the environment and to not contribute to a depletion of raw material resources, we kindly ask you to return the device by fully stamped mail (!) to the following address:

Water-i.d. GmbH
Daimlerstrasse 20
D-76344 Eggenstein-Leopoldshafen
Germany

EasyShaker™ battery certifications and shipping conformity statements are available upon request (support@water-id.com).



Technical Data

EasyShaker™ packaging

| Description | Value | Unit |
|------------------------|-------|------|
| Width | 513 | mm |
| Hight | 140 | mm |
| Depth | 382 | mm |
| Weight incl. test case | 5 | kg |

EasyShaker™ testing case

| Description | Value | Unit |
|-----------------------------|-------|------|
| Width | 505 | mm |
| Hight | 132 | mm |
| Depth | 370 | mm |
| Weight incl. all components | 4,72 | kg |

EasyShaker™ testing device

| Description | Value | Unit |
|----------------|-------|------|
| Width | 80 | mm |
| Hight | 72 | mm |
| Depth | 80 | mm |
| Weight (empty) | 0,51 | kg |

Design

Description

Two-piece anodised aluminium housing with screw cap for the housing base

Display

| Description | Value | Unit |
|-------------|-------|------|
|-------------|-------|------|

| | | |
|---------------------------|--|--|
| OLED-Display (monochrome) | | |
|---------------------------|--|--|

| | | |
|------------|--------|-------|
| Resolution | 124x64 | pixel |
|------------|--------|-------|

Buttons

| Description | Value | Unit |
|-------------|-------|------|
|-------------|-------|------|

| | | |
|--------------------------|--|--|
| Function keys - Lifetime | | |
|--------------------------|--|--|

| | | |
|------------------------------------|--------|---|
| Switching cycles (per push button) | 12.500 | - |
|------------------------------------|--------|---|

| | | |
|----|----|-------|
| or | >5 | years |
|----|----|-------|

System startup

| Description | Value | Unit |
|-------------|-------|------|
|-------------|-------|------|

| | | |
|--|---|---|
| Time from switching on the device to activation of all functions | 3 | s |
|--|---|---|

Power supply

| Description | Value | Unit |
|--------------------------------|------------------|------|
| Battery type: AA Alkaline 1.5V | | |
| Voltage | 1.5 | V DC |
| Size | AA | - |
| Technology | Alkaline/Lithium | - |
| Capacity | >2.500 | mAh |
| Quantity | 2 | pcs. |
| Power consumption test unit | <1 | W |

Measurement values and measurement accuracy

| Description | Value | Unit |
|---|-----------|-----------------------|
| Measurement value: Base Number (BN) | | |
| Measurement range | 0 – 150 | BN |
| Measurement accuracy (typical) | +/-5 | % of Measured value |
| Measurement duration (adjustable) | 1 – 30 | min |
| Measurement value: Water content in Oil (WiO) | | |
| Measurement range | 0,03 – 10 | V% (H ₂ O) |
| Measurement accuracy (typical) | +/-10 | % of Measured value |
| Measurement duration (adjustable) | 1 – 30 | min |
| Systemuhr (Measurement accuracy) | 1 | s |

Environmental conditions

| Description | Value | Unit |
|------------------------|------------|------|
| Operating temperature | +10 to +50 | °C |
| Storage temperature | -10 – +60 | °C |
| Transport temperature | -10 – +60 | °C |
| Operating air humidity | ≤90 | % |
| Storage air humidity | ≤90 | % |

Electromagnetic compatibility (EMC)

| Description | Value | Unit | Standard |
|--|--|------------------------|--|
| Generic standard: Electrical equipment for measurement, control, laboratory use - EMC requirements - Part 1: General requirements. | | | DIN EN 61326-1: 2013-07 |
| Radiated emission | | | |
| Interference field strength | 30 – 1000 | MHz | DIN EN 55011: 2018-05 / CISPR 11: 2015 |
| Interference immunity | | | |
| Electrostatic discharge: Contact Air | 4 8 | kV kV | DIN EN 61000-4-2: 2009-12 |
| Electromagnetic fields: Tipping frequency Field intensity Modulation (AM): Casing | 80 – 1000 1,4 – 2,7 10/3/1 80 | MHz GHz V/m % | DIN EN 61000-4-3: 2021-11 |
| Supply frequent, magnetic field | 30 | AM | DIN EN 61000-4-8: 2010-11 |

Chemical resistance to liquids

| Description | Resistance | Approval for use |
|-----------------------------|------------|------------------|
| WID BN-Reagent | very good | yes |
| WID WiO-Reagent-Set | good | yes |
| WID Cleaning agent test kit | good | yes |

Certificate of Compliance

We hereby certify that the device

EasyShaker™

With it's serial number as stated below,
has passed intensive visual and technical
checks as part of our QM documentation.

We confirm the device got
factory-calibrated.

Water-i.d.® GmbH (Germany)

Andreas Hock, Managing Director
Water-i.d.® GmbH | Daimlerstr. 20
76344 Eggenstein | Germany

S/N
Manufacturing date

Water-i.d.® is certified according to ISO 9001:2015