# ALUMINIUM POLISH - 500 ML

| Version | Revision Date: | SDS Number: | Date of last issue: 01.06.2017 |
|---|---|---|---|
| 6.0 | 28.08.2017 | 510160-00008 | Date of first issue: 11.06.2010 |

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

### 1.1 Product identifier

Trade name : ALUMINIUM POLISH - 500 ML

Product code : 0893121301

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

Use of the Substance/Mixture : Polish, Detergent

### 1.3 Details of the supplier of the safety data sheet

Company : Adolf Wuerth GmbH & Co. KG
Reinhold-Würth-Str. 12-17
74653 Künzelsau

Telephone : +49 794015 0

Telefax : +49 794015 10 00

E-mail address of person responsible for the SDS : prodsafe@wuerth.com

### 1.4 Emergency telephone number

Giftnotrufzentrale Berlin +49 30 30686 790. Gesellschaft (07:00 – 18:00 Uhr) +49 794015 2552

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Specific target organ toxicity - repeated exposure, Category 2 | H373: May cause damage to organs through prolonged or repeated exposure. |
| Chronic aquatic toxicity, Category 3 | H412: Harmful to aquatic life with long lasting effects. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :

Signal word : Warning

Hazard statements : H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements :

**Prevention:**

P273 Avoid release to the environment.

**Response:**

P314 Get medical advice/ attention if you feel unwell.

Hazardous components which must be listed on the label:
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

### 2.3 Other hazards

Vapours may form explosive mixture with air.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Hazardous components**

| Chemical name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | Not Assigned<br><br>649-328-00-1<br>01-2119473851-33 | Flam. Liq. 2; H225<br>STOT SE 3; H336<br>Asp. Tox. 1; H304<br>Aquatic Chronic 2; H411 | >= 10 - < 20 |
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | Not Assigned<br><br>01-2119473977-17 | STOT RE 1; H372<br>Asp. Tox. 1; H304<br>Aquatic Chronic 3; H412 | >= 2,5 - < 10 |
| Ethanol | 64-17-5<br>200-578-6<br>603-002-00-5<br>01-2119457610-43 | Flam. Liq. 2; H225<br>Eye Irrit. 2; H319 | >= 1 - < 10 |

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

| | | |
|---|---|---|
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists. |
| If inhaled | : | If inhaled, remove to fresh air.<br>Get medical attention if symptoms occur. |
| In case of skin contact | : | In case of contact, immediately flush skin with soap and plenty of water.<br>Get medical attention if symptoms occur. |
| In case of eye contact | : | Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists. |
| If swallowed | : | If swallowed, DO NOT induce vomiting.<br>Get medical attention if symptoms occur.<br>Rinse mouth thoroughly with water. |

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

| | | |
|---|---|---|
| Risks | : | May cause damage to organs through prolonged or repeated exposure.<br>Repeated exposure may cause skin dryness or cracking. |

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

| | | |
|---|---|---|
| Treatment | : | Treat symptomatically and supportively. |

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

| | | |
|---|---|---|
| Suitable extinguishing media | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO2)<br>Dry chemical |
| Unsuitable extinguishing media | : | High volume water jet |

### 5.2 Special hazards arising from the substance or mixture

| | | |
|---|---|---|
| Specific hazards during fire-fighting | : | Do not use a solid water stream as it may scatter and spread fire.<br>Flash back possible over considerable distance.<br>Vapours may form explosive mixtures with air.<br>Exposure to combustion products may be a hazard to health. |
| Hazardous combustion products | : | Metal oxides<br>Carbon oxides<br>Nitrogen oxides (NOx) |

### 5.3 Advice for firefighters

| | | |
|---|---|---|
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment. |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

| | | |
|---|---|---|
| Personal precautions | : | Remove all sources of ignition.<br>Use personal protective equipment.<br>Follow safe handling advice and personal protective equipment recommendations. |

### 6.2 Environmental precautions

| | | |
|---|---|---|
| Environmental precautions | : | Discharge into the environment must be avoided.<br>Prevent further leakage or spillage if safe to do so.<br>Prevent spreading over a wide area (e.g. by containment or oil barriers).<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained. |

### 6.3 Methods and material for containment and cleaning up

| | | |
|---|---|---|
| Methods for cleaning up | : | Non-sparking tools should be used.<br>Soak up with inert absorbent material.<br>Suppress (knock down) gases/vapours/mists with a water spray jet.<br>For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.<br>Clean up remaining materials from spill with suitable absorbent.<br>Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.<br>Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. |

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.
Avoid inhalation of vapour or mist.
Do not swallow.
Avoid contact with eyes.
Handle in accordance with good industrial hygiene and safety practice.
Keep container tightly closed.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in properly labelled containers. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Advice on common storage : Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Explosives
Gases

Storage class (TRGS 510) : 10, Combustible liquids

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| Aluminum oxide | 1344-28-1 | AGW (Inhalable fraction) | 10 mg/m3 | DE TRGS 900 |

| | | | | |
|---|---|---|---|---|
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). | | | |
| | | AGW (Alveolate fraction) | 1,25 mg/m3 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). | | | |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | Not Assigned | AGW | 1.500 mg/m3 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | Group exposure limit for hydrocarbon solvent mixtures, Commission for dangerous substances, See also No. 2.9 of the TRGS 900 | | | |
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | Not Assigned | AGW | 100 mg/m3 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | Group exposure limit for hydrocarbon solvent mixtures, Commission for dangerous substances, See also No. 2.9 of the TRGS 900 | | | |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | Not Assigned | AGW | 600 mg/m3 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | Group exposure limit for hydrocarbon solvent mixtures, Commission for dangerous substances, See also No. 2.9 of the TRGS 900 | | | |
| Ethanol | 64-17-5 | AGW | 500 ppm<br>960 mg/m3 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II) | | | |
| Further information | Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., When there is compliance with the OEL | | | |

| | |
|---|---|
| | and biological tolerance values, there is no risk of harming the unborn child |

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|---|---|---|---|---|
| Aluminum oxide | Workers | Inhalation | Long-term local effects | 15,63 mg/m3 |
| | Workers | Ingestion | Long-term systemic effects | 3,29 mg/kg bw/day |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | Workers | Inhalation | Long-term systemic effects | 2035 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 773 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 608 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 699 mg/kg bw/day |
| | Consumers | Ingestion | Long-term systemic effects | 699 mg/kg bw/day |
| Ethanol | Workers | Inhalation | Acute local effects | 1900 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 343 mg/kg bw/day |
| | Workers | Inhalation | Long-term systemic effects | 950 mg/m3 |
| | Consumers | Inhalation | Acute local effects | 950 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 206 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 114 mg/m3 |
| | Consumers | Ingestion | Long-term systemic effects | 87 mg/kg bw/day |

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

| Substance name | Environmental Compartment | Value |
|---|---|---|
| Aluminum oxide | Fresh water | 74,9 µg/l |
| | Sewage treatment plant | 20 mg/l |
| Ethanol | Fresh water | 0,96 mg/l |
| | Marine water | 0,79 mg/l |
| | Intermittent use/release | 2,75 mg/l |
| | Sewage treatment plant | 580 mg/l |
| | Fresh water sediment | 3,6 mg/kg |
| | Marine sediment | 2,9 mg/kg |
| | Soil | 0,63 mg/kg |

| | | |
|---|---|---|
| | Oral (Secondary Poisoning) | 720 mg/kg food |

### 8.2 Exposure controls

**Engineering measures**

Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.

**Personal protective equipment**

Eye protection : Wear the following personal protective equipment:
Safety glasses

Hand protection

| | | |
|---|---|---|
| Material | : | Natural Rubber |
| Break through time | : | 480 min |
| Glove thickness | : | >= 0,5 mm |
| Directive | : | DIN EN 374 |
| Remarks | : | Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. |

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
Flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Combined particulates and organic vapour type (A-P)

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | paste |
| Colour | : | grey |
| Odour | : | characteristic |
| Odour Threshold | : | No data available |
| pH | : | No data available |

| | | |
|---|---|---|
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | > 60 - < 70 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | 1,048 g/cm3 (20 °C) |
| Solubility(ies) | | |
| Water solubility | : | partly miscible |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, kinematic | : | > 21 mm2/s (40 °C) |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |

### 9.2 Other information

| | | |
|---|---|---|
| Flammability (liquids) | : | No data available |
| Particle size | : | Not applicable |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Not classified as a reactivity hazard.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

| | | |
|---|---|---|
| Hazardous reactions | : | Combustible liquid.<br>Vapours may form explosive mixture with air.<br>Can react with strong oxidizing agents. |

### 10.4 Conditions to avoid

| | | |
|---|---|---|
| Conditions to avoid | : | Heat, flames and sparks. |

### 10.5 Incompatible materials

| | | |
|---|---|---|
| Materials to avoid | : | Oxidizing agents |

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

| | | |
|---|---|---|
| Information on likely routes of exposure | : | Inhalation<br>Skin contact<br>Ingestion<br>Eye contact |

**Acute toxicity**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5.000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 23,3 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |
| Acute dermal toxicity | : | LD50 (Rat): > 2.800 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5.000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 13,1 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>Assessment: The substance or mixture has no acute inhalation toxicity |

| | | |
|---|---|---|
| Acute dermal toxicity | : | LD50 (Rat): > 3.500 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Ethanol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5.000 mg/kg<br>Method: OECD Test Guideline 401 |
| Acute inhalation toxicity | : | LC50 (Rat): 124,7 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |

**Skin corrosion/irritation**

Repeated exposure may cause skin dryness or cracking.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Assessment: Repeated exposure may cause skin dryness or cracking.

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Assessment: Repeated exposure may cause skin dryness or cracking.

**Ethanol:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Species: Rabbit
Result: No eye irritation

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation

**Ethanol:**

Species: Rabbit
Method: OECD Test Guideline 405
Result: Irritation to eyes, reversing within 21 days

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

**Ethanol:**

Test Type: Local lymph node assay (LLNA)
Exposure routes: Skin contact
Species: Mouse
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Mouse<br>Application Route: Ingestion<br>Result: negative |
| Germ cell mutagenicity- Assessment | : | Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P) |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Chromosome aberration test in vitro<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Mouse<br>Application Route: Ingestion<br>Result: negative |

**Ethanol:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative<br><br>Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Rodent dominant lethal test (germ cell) (in vivo)<br>Species: Mouse<br>Application Route: Ingestion<br>Result: equivocal |

**Carcinogenicity**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P) |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Species: Rat
Application Route: inhalation (vapour)
Exposure time: 13 weeks
Result: negative
Remarks: Based on data from similar materials

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Two-generation reproduction toxicity study<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Result: negative<br>Remarks: Based on data from similar materials |
| Effects on foetal development | : | Test Type: Embryo-foetal development<br>Species: Rat |

Application Route: inhalation (vapour)
Result: negative
Remarks: Based on data from similar materials

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Reproduction/Developmental toxicity screening test<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Result: negative |
| Effects on foetal development | : | Test Type: Embryo-foetal development<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Result: negative |

**Ethanol:**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Two-generation reproduction toxicity study<br>Species: Mouse<br>Application Route: Ingestion<br>Result: negative |

**STOT - single exposure**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Assessment: May cause drowsiness or dizziness.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Components:**

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Target Organs: Central nervous system
Assessment: Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Species: Rat
NOAEL: 5,8 mg/l
Application Route: inhalation (vapour)
Exposure time: 13 Weeks

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Species: Rat

NOAEL: 2,34 mg/l
LOAEL: 4,67 mg/l
Application Route: inhalation (vapour)
Exposure time: 6 Months
Remarks: Based on data from similar materials

**Ethanol:**

Species: Rat
NOAEL: 1.280 mg/kg
LOAEL: 3.156 mg/kg
Application Route: Ingestion
Exposure time: 90 Days

**Aspiration toxicity**

Not classified based on available information.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Toxicity to fish | : | LL50 (Oncorhynchus mykiss (rainbow trout)): 3 - 10 mg/l<br>Exposure time: 96 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EL50 (Daphnia magna (Water flea)): 4,6 - 10 mg/l<br>Exposure time: 48 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 202 |
| Toxicity to algae | : | EL50 (Pseudokirchneriella subcapitata (green algae)): 10 - 30 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOELR (Pseudokirchneriella subcapitata (green algae)): 10 mg/l<br>Exposure time: 72 h |

| | | |
|---|---|---|
| | | Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC: 0,17 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 211 |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Toxicity to fish | : | LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/l<br>Exposure time: 96 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EL50 (Daphnia magna (Water flea)): 100 - 200 mg/l<br>Exposure time: 48 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 202 |
| Toxicity to algae | : | EL50 (Pseudokirchneriella subcapitata (green algae)): > 10 - 100 mg/l<br>Exposure time: 72 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials<br><br>NOELR (Pseudokirchneriella subcapitata (green algae)): 3 mg/l<br>Exposure time: 72 h<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOELR: 0,28 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Test substance: Water Accommodated Fraction<br>Method: OECD Test Guideline 211<br>Remarks: Based on data from similar materials |

**Ethanol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): > 1.000 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Ceriodaphnia (water flea)): > 1.000 mg/l<br>Exposure time: 48 h |
| Toxicity to algae | : | ErC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l<br>Exposure time: 72 h<br><br>EC10 (Chlorella vulgaris (Fresh water algae)): 11,5 mg/l<br>Exposure time: 72 h |

| | | |
|---|---|---|
| Toxicity to microorganisms | : | EC50 (Pseudomonas putida): 6.500 mg/l<br>Exposure time: 16 h |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC: 9,6 mg/l<br>Exposure time: 9 d<br>Species: Daphnia magna (Water flea) |

### 12.2 Persistence and degradability

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Biodegradation: 81 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301F<br>Remarks: Based on data from similar materials |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Biodegradation: 74,7 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301F |

**Ethanol:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Biodegradation: 84 %<br>Exposure time: 20 d |

### 12.3 Bioaccumulative potential

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: > 4<br>Remarks: Expert judgement |

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: > 4 |

**Ethanol:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: -0,35 |

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

Not relevant

### 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

| | | |
|---|---|---|
| Product | : | Dispose of in accordance with local regulations.<br>According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.<br>Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. |
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>Empty containers retain residue and can be dangerous.<br>Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.<br>If not otherwise specified: Dispose of as unused product. |
| Waste Code | : | The following Waste Codes are only suggestions:<br><br>used product<br>080203, aqueous suspensions containing ceramic materials<br><br>unused product<br>080203, aqueous suspensions containing ceramic materials<br><br>uncleaned packagings<br>150110, packaging containing residues of or contaminated by dangerous substances |

## SECTION 14: Transport information

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

| | | Quantity 1 | Quantity 2 |
|---|---|---|---|
| 34 | Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d) | 2.500 t | 25.000 t |

Water contaminating class (Germany) : WGK 2 significantly water endangering
Classification according to AwSV, Annex 1 (5.2)

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 32,95 %

Regulation (EC) No. 648/2004, as amended : 30 % and more: Aliphatic hydrocarbons
5 % or over but less than 15 %: Soap
less than 5 %: Non-ionic surfactants

**Other regulations:**

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

**Full text of H-Statements**

| | | |
|---|---|---|
| H225 | : | Highly flammable liquid and vapour. |
| H304 | : | May be fatal if swallowed and enters airways. |
| H319 | : | Causes serious eye irritation. |
| H336 | : | May cause drowsiness or dizziness. |
| H372 | : | Causes damage to organs through prolonged or repeated exposure. |
| H411 | : | Toxic to aquatic life with long lasting effects. |
| H412 | : | Harmful to aquatic life with long lasting effects. |

**Full text of other abbreviations**

| | | |
|---|---|---|
| Aquatic Chronic | : | Chronic aquatic toxicity |
| Asp. Tox. | : | Aspiration hazard |
| Eye Irrit. | : | Eye irritation |
| Flam. Liq. | : | Flammable liquids |
| STOT RE | : | Specific target organ toxicity - repeated exposure |
| STOT SE | : | Specific target organ toxicity - single exposure |
| DE TRGS 900 | : | Germany. TRGS 900 - Occupational exposure limit values. |
| DE TRGS 900 / AGW | : | Time Weighted Average |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature;

SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Further information**

| | | |
|---|---|---|
| Sources of key data used to compile the Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/ |

| **Classification of the mixture:** | | **Classification procedure:** |
|---|---|---|
| STOT RE 2 | H373 | Calculation method |
| Aquatic Chronic 3 | H412 | Calculation method |

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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