

Aaron Chemistry GmbH

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 17.09.2012 Print Date 05.10.2016 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING **Product identifiers** 1.1 : Acetaldehyde oxime Product name **Product Number** 52079 : Brand Aaron Chemistry GmbH CAS-No. 107-29-9 · 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses : Laboratory chemicals, Manufacture of substances 1.3 Details of the supplier of the safety data sheet Aaron Chemistry GmbH Company Am Fischweiher 41-43 D-82481 Mittenwald +49 8823 917521 Telephone +49 8823 917523 Fax E-mail address info@aaron-chemistry.de

1.4 **Emergency telephone number**

Emergency Phone # +49 8823 917521 :

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Flammable liquids (Category 3) Acute toxicity, Inhalation (Category 4) Acute toxicity, Oral (Category 4) Eye irritation (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC Flammable. Harmful by inhalation and if swallowed. Irritating to eyes.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram



| Signal word | Warning |
|-----------------------------------|--|
| Hazard statement(s) | |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| Precautionary statement(s) | |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Supplemental Hazard Statements | none |

Aaron Chemistry - 52079

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



| R-phrase(s) R10 R20/22 R36 | Flammable. Harmful by inhalation and if swallowed. Irritating to eyes. |
|-------------------------------------|---|
| S-phrase(s) S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |

2.3 Other hazards - none

| 3. | COMPOSITION/INFORMATION ON INGREDIENTS | | |
|-----|--|------------------------------------|---------------|
| 3.1 | Substances Synonyms | : Acetaldoxime | |
| | Formula | : C ₂ H ₅ NO | |
| | Molecular Weight | : 59,07 g/mol | Concentration |
| | Acetaldehyde oxime | | Concentration |
| | CAS-No. EC-No. | 107-29-9 203-479-6 | - |
| | | | |

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

7.3 Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| a) | Appearance | Form: liquid |
|----|--|---|
| b) | Odour | no data available |
| c) | Odour Threshold | no data available |
| d) | рН | no data available |
| e) | Melting point/freezing point | no data available |
| f) | Initial boiling point and boiling range | 115 °C - lit. |
| g) | Flash point | 40 °C - open cup |
| h) | Evaporation rate | no data available |
| i) | Flammability (solid, gas) | no data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 50 %(V) Lower explosion limit: 4,2 %(V) |
| k) | Vapour pressure | 17 hPa at 25 °C |
| I) | Vapour density | no data available |
| m) | Relative density | 0,969 g/mL at 25 °C |
| n) | Water solubility | no data available |
| o) | Partition coefficient: n- octanol/water | log Pow: -0,1 at 25 °C |
| p) | Autoignition temperature | no data available |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | no data available |
| t) | Oxidizing properties | no data available |
| | ner safety information | |

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity no data available

9.2

10.2 Chemical stability no data available

Aaron Chemistry - 52079

10.3 Possibility of hazardous reactions no data available

- 10.4 Conditions to avoid Heat, flames and sparks.
- 10.5 Incompatible materials Strong oxidizing agents
- 10.6 Hazardous decomposition products Other decomposition products - no data available

TOXICOLOGICAL INFORMATION 11

11.1 Information on toxicological effects

Acute toxicity LD50 Oral - rat - 740 mg/kg

LD50 Inhalation - rat - 4 h - 8.800 mg/m3

Skin corrosion/irritation

Skin - guinea pig - Mild skin irritation

Serious eye damage/eye irritation Eyes - rabbit - Moderate eye irritation

Respiratory or skin sensitization no data available

Germ cell mutagenicity Not mutagenic in Ames Test.

Genotoxicity in vitro - mouse - lymphocyte Mutation in microorganisms

Genotoxicity in vitro - mouse - lymphocyte Mutation in mammalian somatic cells.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard no data available

Inh

Potential health effects

| Inhalation | Harmful if inhaled. May cause respiratory tract irritation. |
|------------|---|
| Ingestion | Harmful if swallowed. |
| Skin | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes | Causes serious eye irritation. |

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: AB2975000

| 12. | ECOLOGICAL INFORMATION | | |
|--------------|--|--|---|
| 12.1 | Toxicity | | |
| | Toxicity to fish LC50 - | Pimephales promelas (fathead mini | now) - 76 mg/l - 96 h |
| 12.2 | Persistence and degradability no data available | | |
| 12.3 | Bioaccumulative potential no data available | | |
| 12.4 | Mobility in soil no data available | | |
| 12.5 | Results of PBT and vPvB assessment no data available | | |
| 12.6 | Other adverse effects Harmful to aquatic life. no data available | | |
| 13. | DISPOSAL CONSIDERATIONS | | |
| 13.1 | Waste treatment methods | | |
| | Product Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. | | |
| | Contaminated packaging Dispose of as unused product. | | |
| 14. | TRANSPORT INFORMATION | | |
| 14.1 | UN number ADR/RID: 2332 | IMDG: 2332 | IATA: 2332 |
| 14.2 | UN proper shipping name ADR/RID: ACETALDEHYDE OX IMDG: ACETALDEHYDE OX IATA: Acetaldehyde oxime | | |
| 14.3 | 3 | | |
| | Transport hazard class(es) ADR/RID: 3 | IMDG: 3 | IATA: 3 |
| 14.4 | Transport hazard class(es) | IMDG: 3 IMDG: III | IATA: 3 IATA: III |
| 14.4 14.5 | Transport hazard class(es) ADR/RID: 3 Packaging group | | |
| | Transport hazard class(es) ADR/RID: 3 Packaging group ADR/RID: III Environmental hazards | IMDG: III | ΙΑΤΑ: ΙΙΙ |
| 14.5 | Transport hazard class(es) ADR/RID: 3 Packaging group ADR/RID: III Environmental hazards ADR/RID: no Special precautions for user | IMDG: III | ΙΑΤΑ: ΙΙΙ |
| 14.5 14.6 | Transport hazard class(es) ADR/RID: 3 Packaging group ADR/RID: III Environmental hazards ADR/RID: no Special precautions for user no data available REGULATORY INFORMATION | IMDG: III | IATA: III IATA: no |
| 14.5 14.6 | Transport hazard class(es) ADR/RID: 3 Packaging group ADR/RID: III Environmental hazards ADR/RID: no Special precautions for user no data available REGULATORY INFORMATION This safety datasheet complies w | IMDG: III IMDG Marine pollutant: no | IATA: III IATA: no EC) No. 1907/2006. |

16. OTHER INFORMATION

Further information

Copyright 2012 Aaron Chemistry GmbH. License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aaron Chemistry GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See www.aaron-chemistry.de.