

# SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 16

Revision date: 06/09/2017

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

### 1.1 Product identifiers

Product name: 2-Methoxyethyl Acetate  
Product code: 52259

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

Identified uses: Reagents

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

Supplier: Company : Aaron Chemistry GmbH  
: Am Fischweiher 41-43  
: D-82481 Mittenwald  
: Germany  
Telephone: : +49-8823-917521  
Fax: : +49-8823-917523  
email: : info@aaron-chemistry.de



1.4 Emergency telephone number : +49-8823-917521

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### PHYSICAL HAZARDS

Flammable liquids Category 3

#### HEALTH HAZARDS

Serious eye damage/eye irritation Category 2

Reproductive toxicity Category 1B

Specific target organ toxicity Respiratory tract irritation

- Single exposure [Category 3]

ENVIRONMENTAL HAZARDS Not classified

### 2.2 Label elements

#### Pictograms or hazard symbols



#### Signal word

#### Hazard statements

Danger

H226-Flammable liquid and vapour.

H319-Causes serious eye irritation.

H360FD-May damage fertility. May damage the unborn child.

H335-May cause respiratory irritation.

#### Precautionary statements

##### [Prevention]

P202-Do not handle until all safety precautions have been read and understood.

P210-Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233-Keep container tightly closed.

P241+P242+P243-Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against ignition by the static discharge and the spark.

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.

P271-Use only outdoors or in a well-ventilated area.

P280-Wear protective gloves/eye protection/face protection.

##### [Response]

P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313-If eye irritation persists: Get medical advice/attention.

P303+P361+P353-IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P264-Wash hands thoroughly after handling.

P308+P313-IF exposed or concerned: Get medical advice/attention.

##### [Storage]

P403+P233-Store in a well-ventilated place. Keep container tightly closed.

P405-Store locked up.

## **SECTION 2: Hazards identification**

<b>[Disposal]</b>	P501-Dispose of contents/container through a waste management company authorized by the local government
<b>2.3 Other hazards</b>	May form explosive peroxides.
<b>Results of PBT and vPvB assessment</b>	
<b>PBT:</b>	Not applicable
<b>vPvB:</b>	Not applicable

## **SECTION 3: Composition/information on ingredients**

<b>3.1 Substances</b>	
<b>Components:</b>	2-Methoxyethyl Acetate
<b>Percent:</b>	>98.0%(GC)
<b>CAS Number:</b>	110-49-6
<b>EC-No:</b>	203-772-9
<b>Synonyms:</b>	Ethylene Glycol Monomethyl Ether Acetate , Acetic Acid 2-Methoxyethyl Ester , Methyl Cellosolve Acetate , Methyl Glycol Acetate
<b>Chemical Formula:</b>	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>

## **SECTION 4: First aid measures**

<b>4.1 Description of first aid measures</b>	
<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
<b>Skin contact:</b>	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.
<b>Ingestion:</b>	Get medical advice/attention.Rinse mouth.
<b>Protection of first-aiders:</b>	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	Dizziness, Drowsiness, Headache, Abdominal pain, Nausea, Vomiting, Weakness, Unconsciousness, Dry skin, Redness
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	No data available

## **SECTION 5: Firefighting measures**

<b>5.1 Extinguishing media</b>	
<b>Suitable extinguishing media:</b>	Dry chemical, foam, water in large amounts, carbon dioxide.
<b>5.2 Special hazards arising from the substance or mixture</b>	Carbon monoxide, Carbon dioxide
<b>5.3 Advice for firefighters</b>	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment.

## **SECTION 6: Accidental release measures**

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
<b>6.2 Environmental precautions</b>	Prevent product from entering drains.
<b>6.3 Methods and materials for containment and cleaning up</b>	Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.
<b>6.4 Reference to other sections</b>	For disposal see section 13.

## **SECTION 7: Handling and storage**

<b>7.1 Precautions for safe handling</b>	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact! Confirm in advance if peroxides exist when operations involving heating such as distillation are carried out.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store locked up. Store away from incompatible materials such as oxidizing agents.
<b>7.3 Specific end use(s)</b>	No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

<b>8.1 Control parameters</b>	
<b>ACGIH TLV(TWA):</b>	5 ppm (skin)
<b>OSHA PEL(TWA):</b>	25 ppm (skin)
<b>JSOH OELs(TWA):</b>	5 ppm (skin)
<b>8.2 Exposure controls</b>	Install a closed system or local exhaust. Also install safety shower and eye bath.
<b>Respiratory protection:</b>	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
<b>Hand protection:</b>	Impervious gloves.
<b>Eye protection:</b>	Safety goggles. A face-shield, if the situation requires.
<b>Skin and body protection:</b>	Impervious protective clothing. Protective boots, if the situation requires.

## **SECTION 9: Physical and chemical properties**

<b>9.1 Information on basic physical and chemical properties</b>	
<b>Physical state (20°C):</b>	Liquid
<b>Form:</b>	Clear
<b>Colour:</b>	Colorless
<b>Odour:</b>	Ether-like
<b>pH:</b>	No data available
<b>Melting point/freezing point:</b>	-65°C
<b>Boiling point/range:</b>	143°C
<b>Flash point:</b>	51°C
<b>Evaporation rate(Butyl Acetate=1):</b>	No data available
<b>Flammability(solid, gas):</b>	No data available
<b>Flammability or explosive limits:</b>	
<b>Lower:</b>	1.5%
<b>Upper:</b>	12.3%
<b>Vapour pressure:</b>	0.27kPa/20°C
<b>Vapour density:</b>	4.1
<b>Relative density:</b>	1.01
<b>Solubility(ies):</b>	
<b>[Water]</b>	Miscible
<b>[Other solvents]</b>	
<b>Miscible:</b>	Methanol, Acetone, Many organic solvents
<b>Partition coefficient: n-octanol/water:</b>	0.121
<b>Autoignition temperature:</b>	380°C
<b>Decomposition temperature:</b>	No data available
<b>Dynamic Viscosity:</b>	No data available
<b>Kinematic viscosity:</b>	No data available
<b>9.2 Other safety information</b>	No data available

## **SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	May form explosive peroxides.
<b>10.3 Possibility of hazardous reactions</b>	No special reactivity has been reported.
<b>10.4 Conditions to avoid</b>	Spark, Open flame, Static discharge, Air
<b>10.5 Incompatible materials</b>	Oxidizing agents, Acids, Bases

**10.6 Hazardous decomposition products** Carbon monoxide, Carbon dioxide**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

<b>Acute Toxicity:</b>	ihl-hmn TClO:1000 mg/m <sup>3</sup> ihl-rat LClO:7000 ppm/4H orl-rat LD50:2900 mg/kg skn-rbt LD50:5250 uL/kg
<b>Skin corrosion/irritation:</b>	No data available
<b>Serious eye damage/irritation:</b>	eye-rbt 218 mg MLD
<b>Respiratory or skin sensitization:</b>	No data available
<b>Germ cell mutagenicity:</b>	sln-dmg-orl 32000 ppm sln-smc 56600 ppm
<b>Carcinogenicity:</b>	
<b>IARC =</b>	No data available
<b>NTP =</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>STOT-single exposure:</b>	No data available
<b>STOT-repeated exposure:</b>	No data available
<b>Aspiration hazard:</b>	No data available
<b>RTECS Number:</b>	KL5950000

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

<b>Fish:</b>	No data available
<b>Crustacea:</b>	No data available
<b>Algae:</b>	No data available

**12.2 Persistence and degradability** 95% (by BOD), 100% (by HPLC), 97% (by TOC)

**12.3 Bioaccumulative potential** 0.70

**12.4 Mobility in soil**

<b>Log Pow:</b>	0.121
<b>Soil adsorption (Koc):</b>	27
<b>Henry's Law constant(PaM<sup>3</sup>/mol):</b>	3.1 x 10 <sup>-2</sup>

**12.5 Results of PBT and vPvB assessment**

<b>PBT:</b>	Not applicable
<b>vPvB:</b>	Not applicable

**12.6 Other adverse effects** No data available

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

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

**SECTION 14: Transport information**

**14.1 UN number** 1189

**14.2 UN proper shipping name**

<b>ADR/RID</b>	Ethylene glycol monomethyl ether acetate
<b>IMDG/IMO</b>	Ethylene glycol monomethyl ether acetate
<b>ICAO/IATA</b>	Ethylene glycol monomethyl ether acetate

**14.3 Transport hazard class(es)**

<b>ADR/RID</b>	3: Flammable liquid.
<b>IMDG/IMO</b>	3: Flammable liquid.
<b>ICAO/IATA</b>	3: Flammable liquid.

**14.4 Packaging group**

<b>ADR/RID</b>	III
<b>IMDG/IMO</b>	III
<b>ICAO/IATA</b>	III

**14.5 Environmental hazards**

<b>Marine pollutant</b>	-
-------------------------	---

14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

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

**Water Hazard Classes (WGK) :**  
**Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006**

Class 1 - Low hazard to waters  
Not listed

##### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

#### **SECTION 16: Other information**

**Prepared by:** Aaron Chemistry GmbH

**Issue date:** 06/09/2017

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet**