

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70805 Ethyl Alcohol, min. 99.8%

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Revised edition: 03.08.2022

Version: 7

Printed: 22.11.2023

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Ethyl Alcohol, min. 99.8%

Article No.: 70805

UFI: DA4D-G5UW-Y003-N79J

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Chemical industry
Solvent
Pharmaceutical industry

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

H225 Flammable liquids, hazard category 2
Cat.: 2 Eye irritation, hazard category 2
H319 Highly flammable liquid and vapour.
Cat.: 2 Causes serious eye irritation.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Hazard designation:



GHS02-2

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GHS07

Signal word:

Danger

Hazard designation:

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

Safety designation:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P280 Wear protective gloves/ clothing/ eye/ face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.
P501 Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Ethanol dehydrated, denatured with 1% MEK, 1% IPA, 10 ppm Bitrex®

Information on Components / Hazardous Ingredients:

Ethanol (H225-319); REACH Reg. No. 01-2119457610-43	50 - 100 %	CAS-Nr: 64-17-5 EINECS-Nr: 200-578-6 EC-Nr: 603-002-00-5
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Methyl ethyl ketone (MEK) (2-Butanone; H225-319-336); REACH Reg. Nr. 02-2119457290-43-xxxx	< 1 %	CAS-Nr: 78-93-3 EINECS-Nr: 201-159-0 EC-Nr: 606-002-00-3
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Remove affected person from danger area and lay down.
Take affected persons out into the fresh air.
Keep affected person warm in a calm area.

After inhalation:

Supply fresh air.

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Consult physician if symptoms persist.

After skin contact:

*Wash with soap and rinse with plenty of water.
If symptoms persist, consult a physician.*

After eye contact:

Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.

After ingestion:

*Rinse mouth and give plenty of water to drink.
If symptoms persist consult physician.
In case of unconsciousness, store, respectively transport in stable side position.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

*Contact with eyes or after inhalation can cause irritation of the mucous membrane.
Causes depression of the central nervous system.
Skin redness, nausea.*

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Ethanol:

Symptoms of acute intoxication: In addition to irritation of affected mucous membranes, substances ingested percutaneously and inhaled only cause an implied impairment of the inhibitory functions of the CNS, clinically recognizable as the onset of a euphoric stage.

At the same time, facial and skin redness is noticeable due to the dilation of the blood vessels in the body. Use alcohol test tubes to confirm the diagnosis and estimate the amount ingested.

Instructions on medical first aid: Generally no treatment required, at most protection against heat loss and symptomatic measures indicated. Further stationary treatment after poisoning only necessary in exceptional cases.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO₂), extinguishing powder, water spray jet.

Unsuitable extinguishing media:

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon monoxide, carbon dioxide.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device. next page: 4

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Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

Cool exposed containers with water spray.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear appropriate protective equipment. Keep spectators away. Provide adequate ventilation. Keep away from sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Contain with absorbent material (sand, Silica Gel, acid binder, universal absorbent, saw dust) and dispose accordingly.

Rinse with lots of water.

6.4. Reference to other Sections

For information for safe handling see Section 7.

Protective clothing, see Section 8.

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Keep containers tightly closed.

Provide adequate ventilation, also in floor area (vapors are heavier than air).

Hygienic measures:

Do not inhale gas/fumes/vapours/aerosols.

Do not eat or drink during work. Do not smoke.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a cool and well ventilated location.

Protect product from direct sunlight.

Requirements for storage areas and containers:

The floor has to be impermeable, fluid resistant and easy to clean. Suitable material for containers and pipelines: stainless steel.

Information on fire and explosion protection:

Keep away from sources of ignition - do not smoke. Take

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measures to prevent electrostatic discharge.

Storage class:

3; Flammable liquids (TRGS 510)

Further Information:

*Do not store together with: foodstuffs, beverages and feed.
Ensure product retention, taking into account water hazards and storage quantities in accordance with water regulations.*

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

Ethanol (CAS 64-17-5): TLV: Short-term value: 800 ppm, 1520 mg/m³; Long-term value: 200 ppm, 380 mg/m³

MEK (CAS 78-79-3), TWA: Short-term value: 200 ppm, 600 mg/m³; Long-term value: 200 ppm, 600 mg/m³

Parameters to be controlled:

Ethanol (64-17-5): TWA (AT): 1900 mg/m³, 1000 ppm (long-term value); TWA (CH): 960 mg/m³, 500 ppm (long-term value); 1920 mg/m³, 1000 ppm (short-term value)

MEK (CAS 78-93-3):

MAK (CH): 200 ppm, 590 mg/m³ (long-term value); 200 ppm, 590 mg/m³ (short-term value)

IOELV (EU): Short term value: 900 mg/m³, 300 ppm; Long term value: 600 mg/m³, 200 ppm

Derived No-Effect Level (DNEL):

Ethanol (CAS 64-17-5):

1900 mg/m³ (worker, inhalation, short-term exposure - local effect)

343 mg/kg bw/d (worker, skin contact, long-term exposure - systemic effects)

950 mg/m³ (worker, inhalation, long-term exposure - systemic); (consumer, inhalation; short-term exposure - local)

MEK (78-93-3):

1161 mg/kg (worker, skin contact, long-term exposure - systemic effects)

600 mg/m³ (worker, inhalation, long-term exposure - systemic effects)

Predicted No-Effect Concentration (PNEC):

Ethanol (CAS 64-17-5):

Fresh water: 0.96 mg/l

Seawater: 0.79 mg/l

Fresh water sediment: 3.6 mg/kg

Seawater sediment: 2.9 mg/kg

Sporadic release: 2.75 mg/l

Sewage treatment system (STP): 580 mg/l

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Soil: 0.3 mg/kg
MEK (78-93-3):
Fresh water / Seawater: 55.8 mg/l
Fresh water sediment / Seawater sediment: 284.7 mg/kg
Sewage treatment system (STP): 709 mg/kg
Boden: 22.5 mg/kg

Additional Information:

Biological limit value:
MEK (CAS 78-93-3): BAT/BLV (DE): 2 mg/l; BAT (CH): 2 mg/l

8.2. Exposure Controls

Technical protective measures:

Adequate ventilation to control airborne concentrations below the exposure limits.

Personal Protection

General protective measures:

Remove contaminated clothing immediately.
Avoid contact with skin and avoid inhalation of vapour. Do not eat, drink or smoke while working.

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type A.

Hand protection:

Solvent resistant protective gloves.
The manufacturer's directions for use should be observed because of the great diversity of types.

Protective glove material:

Butyl rubber (480 min, 0.7 mm)
Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing, solvent resistant

Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: liquid
Color: colorless
Odor: alcohol-like
Odor threshold:

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	<i>no information available</i>
<i>pH-Value:</i>	5.7 (DIN EN ISO 10523)
<i>Melting temperature:</i>	-114.5°C (OECD 102, Ethanol)
<i>Boiling temperature:</i>	78°C (OECD 103, Ethanol)
<i>Flash point:</i>	10 - 13°C Vol.-% (DIN 51755)
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	363-425°C (Ethanol, CSA)
<i>Upper explosion limit:</i>	13.5 Vol.-% (ASTM E681-94)
<i>Lower explosion limit:</i>	2.5 Vol.-% (ASTM E681-94)
<i>Vapor pressure:</i>	57.3 hPa (OECD 104, Ethanol)
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	0.79 g/cm ³ (DIN EN ISO 787-10)
<i>Solubility in water:</i>	soluble
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>Product is not auto-ignitable.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not available</i>
<i>Explosive properties:</i>	<i>Product is not explosive; however, an explosive vapor/air mixture can be formed.</i>
<i>Oxidizing properties:</i>	<i>none</i>
<i>Bulk density:</i>	

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

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Temperature class: T1 (maximum temperature: 450°C)

Explosion group: IIB (Value of the 0.5 mm < MESH < 0.9 mm)

10. Stability and Reactivity

10.1. Reactivity

No decomposition if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Reacts with strong acids and oxidizing agents.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid heat.

Thermal decomposition:

10.5. Incompatible Materials

Alkaline and alkaline earth metals in powder form.

10.6. Hazardous Decomposition Products

Formation of highly flammable fumes/vapors.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Not classified as acute toxic.

Acute Toxicity

LD50, oral:

Ethanol (CAS 64-17-5): 10470 mg/kg (rat; OECD 401)

MEK: > 2193 mg/kg (rat; OECD 423)

LD50, dermal:

Ethanol (CAS 64-17-5): > 2000 mg/kg (rat; OECD 402)

MEK: > 5000 mg/kg (rabbit; OECD 402)

LC50, inhalation:

Ethanol (64-17-5): 117 mg/kg (rat; OECD 403)

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Causes serious eye irritation.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

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Mutagenicity:

No mutagenic effects known.

Reproductive toxicity:

No negative effects known.

Carcinogenicity:

No cancerogenic effect known.

Teratogenicity:

No teratogenic effects expected.

Specific target organ toxicity (STOT):

*Repeated exposure: Not classified based on available information.
Single exposure: Not classified based on available information.*

Aspiration hazard:

No risk of aspiration.

11.2. Information on other Hazards

*Endocrine Disrupting Properties:
MEK (78-93-3): List II*

12. Ecological Information

12.1. Aquatic Toxicity

Not hazardous to the aquatic environment.

Fish toxicity:

*Ethanol: LC50: 15400 mg/l (96h, fisch); EC50: 12700 mg/l (96h, fish)
MEK: LC50: 2993 mg/l (96h, Fish); LC50: 1816 mg/l (24h, Fish)*

Daphnia toxicity:

*Ethanol: LC50: 1806 mg/l (10d, aquatic invertebrates)
MEK: EC50: 308 mg/l (48h, aquatic invertebrates); EC50: > 345 mg/l (24h, aquatic invertebrates)*

Bacteria toxicity:

No data available.

Algae toxicity:

*Ethanol: ErC50: 22000 mg/l (96h, algae); ErC50: 675 mg/l (4d, algae)
MEK: ErC50: 2029 mg/l (96h, algae); ErC50: 1901 mg/l (24h, algae)*

12.2. Persistency and Degradability

*Ethanol: readily biodegradable (69 %, 5d)
Oxygen consumption: 69 % (5d)*

12.3. Bioaccumulation

*Ethanol: log Kow -0.77. No bioaccumulation.
BSB5/CSB: 0.62110553*

12.4. Mobility

Henry Constant: 0.000138 Pa.m³/mol (20°C)

12.5. Results of PBT- und vPvP Assessment

PBT/vPvB assessment not available as a chemical safety

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assessment is not required / not conducted.

12. 6. Endocrine Disrupting Properties

Not listed.

12. 7. Other Adverse Effects

Water hazard class:

Do not let product contaminate ground water, waterways or sewage system.

Do not allow undiluted product or large quantities of it to reach ground water, waterways or sewage system.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Must not be disposed together with household garbage.

Do not let product enter water systems.

Disposal in accordance with local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA 1170

14. 2. UN Proper Shipping Name

ADR/RID: ETHANOL (Ethylalkohol)

IMDG/IATA: ETHANOL (Ethyl Alcohol)

14. 3. Transport Hazard Classes

ADR Class: 3

Hazard no.: 3

Classification code: F1

Tunnel restriction code: D/E

IMDG Class (sea): 3

Hazard no.: 3

EmS No.: F-E, S-D

IATA Class: 3

Hazard no.: 3

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14.4. Packaging Group

ADR/RID: II

IMDG: II

IATA: II

14.5. Environmental Hazards

Labelling according 5.2.1.8 ADR/RID: no

Labelling according 5.2.1.6.3 IMDG: no

Classification as environmentally hazardous according 2.9.3

IMDG: no

14.6. Special Precautions for User

The rules for Dangerous Goods (ADR) must also be observed within the company grounds.

14.7. Maritime Transport in Bulk according to IMO Instruments

Not transported by sea in bulk.

14.8. Further Information

15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (German Regulation)

Local regulations on chemical accidents:

Seveso-III Directive (2012/18/EU): P5c and E2

Flammable liquids (P5c): Amount 1: 5000 t; Amount 2: 50000 t

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 3

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern above the legal limit value (> 0.1 % (w/w) REACH Regulation (EC) 1907/2006, Article 57).

15.3. Further Information

RoHS Directive 2011/65/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHs): not listed.

Regulation (EC) 850/2004 - Persistent Organic Pollutants and amending Directive 79/117/EEC: not regulated / not applicable

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

Regulation (EU) No. 2019/1148, Annex I - Restricted Explosives
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Precursors (upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients is listed.

Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

VOC Content: 100 %

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.