

Material Safety Data Sheet

SDS date: 18-01-2017

SDS version: 1.1

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

1.1. Product Identifier

Trade Name: Fixative

Product- no.: -

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

Recommended uses: Fixation of colors.

1.3. Details of the supplier of the safety data sheet

Company and address

Creotime.com

Rasmus Færchs Vej 23

7500 Holstebro

Tlf.: +45 96 13 30 10

Contact person and E-mail:

Tina Andresen, info@creotime.com

The Safety data sheet is completed and validated by:

mediator A/S, Centervej 2, DK-6000 Kolding. Consultant: KN

1.4. Emergency telephone number

Use your national or local emergency number - See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP (1272/2008): Aerosol 1;H222, H229.

See full text of H-phrases in section 16.

2.2. Label elements



Signal word:

Danger

Extremely flammable aerosol. (H222)

Pressurised container: May burst if heated. (H229)

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Do not spray on an open flame or other ignition source. (P211)

Do not pierce or burn, even after use. (P251)

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. (P410+P412)

Dispose of contents/container in accordance with local regulation. (P501)

2.3. Other hazards

The product contains organic solvents. Repeated exposure to organic solvents may cause damage to the central nervous system and internal organs fx. liver and kidney.

Additional labelling:

-

Additional warnings:

-

SECTION 3: Composition/information on ingredients

3.1./3.2. Substances/Mixtures

Substance	EU-Index no.	Cas / EINECS no.	CLP-classification	w/w%	Note
Ethanol	603-002-00-5	64-17-5/ 200-578-6	Flam. Liq. 2;H225	30-60	1
Dimethyl ether	603-019-00-8	115-10-6/ 204-065-8	Press. Gas, Flam. Gas 1;H220	20-50	1
Propan-2-ol	603-117-00-0	67-63-0/ 200-661-7	Flam. Liq. 2;H225, Eye Irrit.2;H319, STOT SE 3;H336	<5	1

1 = The substance is an organic solvent.

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	Seek fresh air. Keep victim under observation. Seek medical advice in case of discomfort.
Ingestion:	Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. If vomiting occurs, keep head low so that stomach contents do not enter lungs. Seek medical advice in case of discomfort.
Skin contact:	Immediately remove contaminated clothing. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.
Eye contact:	Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.
Burns:	Flush with water until pain ceases. Remove clothing that is not stuck to the skin – seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.
Additional information:	When obtaining medical advice, show the safety data sheet or label. Symptoms: See section 11.

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

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

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

When obtaining medical advice, show the safety data sheet or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguish with powder, foam or carbon dioxide. Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of vapour and fumes – seek fresh air. Product decomposes in fire conditions and toxic gases such as CO_x may be released. CAUTION! Aerosol containers may explode. Exposure to decomposition products may cause a health hazard.

5.3. Advice for firefighters

Use water or water mist to cool non-ignited stock. Send contaminated extinguishing water for destruction. If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for type of protective equipment. Avoid breathing in substance. Avoid static electricity. Remove ignition sources.

6.2. Environmental precautions

Do not discharge large quantities of concentrated spills and residue into drains - See section 12. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3. Methods and material for containment and cleaning up

Wipe up minor spills with a cloth. See section 13 for instructions on disposal.

6.4. Reference to other sections

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment. Smoking and naked flames prohibited. Use the product under well-ventilated conditions. Running water and eye wash equipment should be available.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Store in a dry, cool, well-ventilated area.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits according to EH40/2005 Workplace exposure limits (Second edition, 2011):

Substance	Long-term exposure limit	Short-term exposure limit	Note
Ethanol	1000 ppm – 1920 mg/m ³	-	-
Dimethyl ether	400 ppm - 766 mg/m ³	500 ppm - 958 mg/m ³	-
Propan-2-ol	400 ppm – 999 mg/m ³	500 ppm – 1250 mg/m ³	-

DNEL and PNEC values:

Ethanol – DNEL:

Inhalation	Short term	Local effects	Workers	1900 mg/m ³
Oral	Long Term	Systemic effects	Workers	-
Dermal	Long Term	Systemic effects	Workers	343 mg/kg bw/day
Inhalation	Long Term	Systemic effects	Workers	950 mg/m ³
Inhalation	Short term	Local effects	General population	950 mg/m ³
Oral	Long Term	Systemic effects	General population	87 mg/kg bw/day
Dermal	Long Term	Systemic effects	General population	206 mg/kg bw/day
Inhalation	Long Term	Systemic effects	General population	114 mg/m ³

Dimethyl ether – DNEL:

Inhalation	Long Term	Systemic effects	Workers	1894 mg/m ³
Inhalation	Long Term	Systemic effects	General population	471 mg/m ³

Propan-2-ol – DNEL:

Dermal	Long Term	Systemic effects	Workers	888 mg/kg bw/day
Inhalation	Long Term	Systemic effects	Workers	500 mg/m ³
Oral	Long Term	Systemic effects	General population	26 mg/kg bw/day
Dermal	Long Term	Systemic effects	General population	319 mg/kg bw/day
Inhalation	Long Term	Systemic effects	General population	89 mg/m ³

Ethanol – PNEC:

Water	Fresh	0.96 mg/L
Water	Marine	0.79 mg/L
Water	Intermittent releases	2.75 mg/L
Soil	-	0.63 mg/kg soil dw

Dimethyl ether– PNEC:

Water	Fresh	0.155 mg/L
Water	Marine	0.016 mg/L
Water	Intermittent releases	1.549 mg/L
Soil	-	0.045 mg/kg soil dw

Propan-2-ol – PNEC:

Water	Fresh	140.9 mg/L
Water	Marine	140.9 mg/L
Water	Intermittent releases	140.9 mg/L
Soil	-	28 mg/kg soil dw

8.2. Exposure controls

There are no exposure scenarios for this product.

Appropriate engineering controls:

Wash hands before breaks, before using restroom facilities, and at the end of the work.

Personal protective equipment:



Breathing equipment:	In case of insufficient ventilation, wear respiratory protective equipment with filter Ax.
Hand protection:	Wear protective gloves made of nitrile rubber or butyl rubber.
Eye protection:	Wear safety goggles if there is a risk of eye splash.
Body and skin protection:	Special work clothing should be used.

Environmental exposure controls:

Make sure that when using the product damming material is available in immediate vicinity. If possible use spillage tray during work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Clear liquid. (Aerosol)
Odour:	Characteristic
Odour threshold:	-
pH:	-
Melting point/ Freezing Point (°C):	-
Initial boiling point and boiling range (°C):	-
Flash point (°C):	>35
Evaporation rate:	-
Flammability (solid, gas), (°C):	>0
Upper / lower flammability or explosion limits (vol-%):	-
Vapour pressure (hPa, 20 °C):	593 (dimethyl ether)
Vapour density (air=1)	-
Relative density:	-
Solubility(ies)	-
Partition coefficient: n-octanol/water:	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
Viscosity (mm ² /sek):	-
Explosive properties:	-
Oxidising properties:	-

9.2. Other information

Content of solids (%):	-
Surface tension (mN/m, 25 °C):	-

SECTION 10: Stability and reactivity

10.1. Reactivity

Non-reactive.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

Aqueous solution reacts with aluminium.

10.4. Conditions to avoid

Avoid heating and contact with ignition sources. Pressurised container: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

10.5. Incompatible materials

Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products

Product decomposes in fire conditions or when heated to high temperatures, and toxic gases such as CO_x may be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Route of exposure	Species	Test	Result
Ethanol	Oral	Rat	LD50	10470 mg/kg bw
Ethanol	Inhalation	Rat	LC50 / 4 h	124.7 mg/L air
Ethanol	Dermal	Rabbit	LD50	> 20000 mL/kg bw
Dimethyl ether	Inhalation	Rat	LC50 / 4 h	164000 ppm
Propan-2-ol	Oral	Rat	LD50	5.84 g/kg bw
Propan-2-ol	Inhalation	Rat	LC50 / 6 h	> 10000 ppm
Propan-2-ol	Dermal	Rabbit	LD50	16.4 mL/kg bw

Symptoms:

Inhalation: The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. May cause drowsiness or dizziness.

Ingestion: Ingestion may cause discomfort.

Skin contact: May irritate the skin – may cause reddening.

Eye contact: May cause eye irritation.

Long term effects:

Prolonged or repeated inhalation of vapours may cause damage to the central nervous system.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
Ethanol	96 h	Fish	LC50	14.2 g/L
Ethanol	48 h	Daphnia	LC50	5012 mg/L
Ethanol	72 h	Algae	EC50	275 mg/L
Dimethyl ether	96 h	Fish	LC50	> 4.1 g/L
Dimethyl ether	48 h	Daphnia	EC50	> 4.4 g/L
Dimethyl ether	96 h	Algae	EC50	154.917 mg/L
Propan-2-ol	96 h	Fish	LC50	9640 mg/L
Propan-2-ol	24 h	Daphnia	LC50	> 10000 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Ethanol	Yes	OECD 301B	97% after 28 day
Dimethyl ether	No	OECD 301D	5% after 28 day

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Ethanol	No	-0,35	-
Dimethyl ether	No	0,07	-

12.4. Mobility in soil

-

12.5. Results of PBT and vPvB assessment

The mixture does not meet the criteria for PBT or vPvB.

12.6. Other adverse effects

None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

EWC Code

16 05 04

Specific labelling

-

Contaminated packaging:

Uncleansed packaging is to be disposed of via the local waste-removal scheme.

SECTION 14: Transport information

The product is covered by the rules for transport of dangerous goods.

14.1 -14.4.

ADR

UN number	UN proper shipping name	Transport hazard class(es)	Packing group
1950	AEROSOLS	2,1	-

IMDG

UN number	UN proper shipping name	Transport hazard class(es)	Packing group
1950	AEROSOLS	2,1	-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

SECTION 15: Regulatory information

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

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Restrictions for application:

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training.

Demands for specific education:

-

Additional labelling:

-

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: Other information

Other information:

Sources:

EC regulation 1907/2006 (REACH).

Directive 2000/532/EC.

EC Regulation 1272/2008 (CLP).

EH40/2005 WELs (United Kingdom (UK), 8/2007).

Full text of H-phrases as mentioned in section 2+3:

H220 - Extremely flammable gas.

H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H280 - Contains gas under pressure; may explode if heated.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

Other

-

Minor changes have been made in following sections:

1-16 – Update to CLP.

This material safety data sheet replaces version:

1.0 (17-07-2013)
