SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006.

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

1.1. Product identifier Leather Dye

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

Fast penetrating leather dye.

1.3. Details of the supplier of the safety data sheet:

Leather`s Choice ApS Mossøvej 11 Phone: +45 86 17 20 08 DK - 8240 Risskov E-mail: mail@laederiet.dk Responsible person for the safety data sheet (e-mail): altox@altox.dk **1.4. Emergency telephone:** NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Highly flammable, irritating and environmentally harmful liquid with long-term effects. Vapours may cause drowsiness or dizziness.

CLP (1272/2008): Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 Aquatic Chronic 3;H412

2.2. Label elements:



Contents: Ethanol, propan-2-ol, 2-(2-butoxy ethoxy)ethanol, 1-methoxy-2-propanol.

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H412: Harmful to aquatic life with long lasting effects.

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

P102: Keep out of reach of children.

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

P261: Avoid breathing vapours/spray.

P280: Wear protective gloves/eye protection.

P501: Dispose of contents/container according to local regulations.

2.3. Other hazards: None known.

PBT/vPvB: The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mix	tures:					
% w/w 50-75	Substance Ethanol	CAS-no. 64-17-5	EC-no. 200-578-6	Index-no. 603-002-00-5	REACH-reg. 01-2119457610-43	Classification Flam. Liq. 2;H225 Eye Irrit. 2;H319
20-25	Propan-2-ol	67-63-0	200-661-7	603-117-00-0	01-2119457558-25	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336
10-25	2-(2-butoxy- ethoxy)ethano	112-34-5 1	203-961-6	603-096-00-8	01-2119475104-44	Eye Irrit. 2;H319
1-20	1-methoxy- 2-propanol	107-98-2	203-539-1	603-064-00-3	01-2119457435-35	Flam. Liq. 3;H226 STOT SE 3;H336
1-10	Metal- complex dye ((Cr +3)	-	-	-	Eye Irrit. 2;H319 Aquatic Chronic 2;H411

Wording of hazard statements - see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation:	Move the affected person to fresh air. Mild cases: Keep at rest. If needed: get medical attention.
	Severe cases: Place the person in recovery position and keep warm. If respiration has stopped, administer
	artificial respiration. Seek medical advice immediately.
Skin contact:	Remove contaminated clothing and wash with soap and water. In case of skin irritation: Seek medical advice.
Eye contact:	Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any.
	If irritation persists: Seek medical advice.
Ingestion:	Rinse mouth and drink plenty of water. Do not induce vomiting. If needed: get medical attention
Burns:	Flush with water until pain ceases. Remove cloth that is not burnt to the skin. If needed seek medical
	attention, continue to flush on the way.

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

Irritation of eyes with pain and redness. Headache, dizziness, coughing, laboured breathing and indisposition. Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media:

Use water spray (never water jet), dry chemical, foam or carbon dioxide.

5.2. Special hazards arising from the substance or mixture:

Do not breathe smoke fumes. In case of fire, the product may form hazardous decomposition products such as oxides of carbon.

5.3. Advice for firefighters:

Remove containers if possible or keep containers cool by spraying with water. When entering burning area: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Remove sources of ignition. Ventilate area.

6.2. Environmental precautions:

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Avoid breathing vapours and spray. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Change contaminated clothes immediately. After use wash with plenty of soap and water. Required access to plenty of water, eyewash fountain and emergency shower. Flammable; do not use near fire or sparks. Do not smoke.

7.2. Conditions for safe storage, including any incompatibilities:

Properly sealed container, in a cool and well-ventilated area, protected against sunlight at 5°-35°C. Fireproof.

Storage must be in compliance with all regulatory requirements pertaining to flammable liquids.

Store securely and out of reach of unauthorized personnel and separated from food, feed etc.

7.3. Specific end use(s):

See section 1.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:

Occupational exposure limits (EH40/2018):

Substance	<u>8-hour TWA</u>	<u>15-min STEL</u>	Comments
Ethanol	$1000 \text{ ppm} = 1920 \text{ mg/m}^3$	-	-
Propan-2-ol	$400 \text{ ppm} = 999 \text{ mg/m}^3$	$500 \text{ ppm} = 1250 \text{ mg/m}^3$	-
2-(2-butoxy ethoxy)ethanol	$10 \text{ ppm} = 67,5 \text{ mg/m}^3$	$15 \text{ ppm} = 101,2 \text{ mg/m}^3$	-
1-methoxy-2-propanol	$100 \text{ ppm} = 375 \text{ mg/m}^3$	$150 \text{ ppm} = 560 \text{ mg/m}^3$	Sk.
Sk.: Can be absorbed through	the skin		

DNEL:	Exposure	Value	Population	Effects
Ethanol	Long term, oral	87 mg/kg/d	Consumer	Systemic
	Long term - dermal	206 mg/kg	Consumer	Systemic
	Long term - inhalation	114 mg/m ³	Consumer	Systemic
	Acute - inhalation	950 mg/m ³	Consumer	Local
	Long term - inhalation	950 mg/m ³	Worker	Systemic
	Long term - dermal	343 mg/kg	Worker	Systemic
Propan-2-ol	Long term, dermal	888 mg/kg/d	Worker	Systemic
Ĩ	Long term, inhalation	500 mg/m^3	Worker	Systemic
	Long term, dermal	319 mg/kg/d	Consumer	Systemic
	Long term, inhalation	89 mg/m^3	Consumer	Systemic
	Long term, oral	26 mg/kg/d	Consumer	Systemic
2-(2-Butoxy-	Long term-inhalation	$67,5 \text{ mg/m}^3$	Worker	Local
ethoxy)ethanol	Long term-inhalation	$67,5 \text{ mg/m}^3$	Worker	Systemic
5,	Long term-dermal	20 mg/kg/day	Worker	Systemic
	Acute-inhalation	$101,2 \text{ mg/m}^3$	Worker	Local
	Long term-inhalation	34 mg/m^3	Consumer	Systemic
	Long term-dermal	10 mg/kg/day	Consumer	Systemic
	Long term-oral	1,25 mg/kg/day	Consumer	Systemic
	Acute-inhalation	$50,6 \text{ mg/m}^3$	Consumer	Local
	Long term-inhalation	34 mg/m ³	Consumer	Local
1-methoxy-	Long term-oral	3,3 mg/kg	Consumer	Systemic
2-propanol	Long term-dermal	18,1 mg/kg	Consumer	Systemic
	Long term-dermal	50,6 mg/kg	Worker	Systemic
	Acute-inhalation	553,5 mg/m ³	Worker	Locale
	Long term-inhalation	43.9 mg/m^3	Consumer	Systemic
	Long term-inhalation	369 mg/m ³	Worker	Systemic
PNEC:	Medium	Value	Method	
Ethanol	Freshwater	0,96 mg/l	Rating Factors	
	Marine water	0,79 mg/l	-	
	Intermittent release	2,75 mg/l	Rating Factors	
	Sewage treatment plant (STP)	580 mg/l	Rating Factors	
	Freshwater sediment	3,6 mg/kg	Rating Factors	
	Soil	0,63 mg/kg	Rating Factors	

SECTION 8: Exposure controls/Personal protection (continued)

PNEC:	Medium	Value	Method
Propan-2-ol	Freshwater	140,9 mg/l	Rating Factors
-	Marine water	140,9 mg/l	Rating Factors
	Intermittent release	140,9 mg/l	Rating Factors
	Freshwaters sediment	552 mg/kg	Rating Factors
	Marine water sediment	552 mg/kg	Rating Factors
	Soil	28 mg/kg	Rating Factors
	STP	2251 mg/l	-
	ingestion, predators	160 mg/kg	-
2-(2-Butoxy-	Freshwater	1 mg/l	_
ethoxy)ethanol	Marine water	0,1 mg/l	-
	Freshwaters sediment	4 mg/kg	-
	Marine water sediment	0,4 mg/kg	-
	Soil	0,4 mg/kg	-
	Sewage treatment plant (STP)	200 mg/l	-
	Intermittent release	3,9 mg/l	-
1-methoxy-	Freshwater	10 mg/l	-
2-propanol	Marine water	1 mg/l	-
	Intermittent release	100 mg/l	-
	Freshwaters sediment	41,6 mg/kg	-
	Marine water sediment	4,17 mg/kg	-
	Sewage treatment plant (STP)	100 mg/l	-

8.2. Exposure controls:

Appropriate engineering controls: Provide efficient ventilation.

Personal protective equipment:

- Inhalation: The product contains substances whose vapours do not allow effective filtration by carbon filters. In case of insufficient ventilation: Use a self-contained breathing apparatus (EN14594). The filter has a limited lifetime and must be changed. Read the instruction.
 Skin: Wear protective gloves of e.g. butyl rubber (EN374). It has not been possible to find data for breakthrough time.
- In case of spill on the glove, it is recommended to change it after use.
- Eyes: Safety goggles (EN166) when there is risk of splashes.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

9.11. Information on busic physical and chemical proj	
Appearance:	Liquid
Odour:	Characteristic
Odour threshold:	Not determined
pH:	8
Melting point/freezing point (°C):	0
Initial boiling point and boiling range (°C):	81
Flash point (°C):	14
Evaporation rate:	>1
Flammability (solid, gas):	Not relevant
Upper/lower flammability or explosive limits (vol%):	1,2-7,5
Vapour pressure (hPa at 20 °C):	Not determined
Relative density (g/cm ³ at 25° C):	0,846
Solubility (in water):	Not miscible
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature (°C):	408
Decomposition temperature (°C):	Not determined
Viscosity:	Not determined
Explosive/oxidising properties:	Not relevant
9.2. Other information:	VOC: 93,76%

SECTION 10: Stability and reactivity

10.1. Reactivity:

No available data.

10.2. Chemical stability:

Stable under normal conditions - see section 7. Combustible.

10.3. Possibility of hazardous reactions:

Vapours can be set on fire by sparks or hot surfaces. Vapours may form explosive mixtures with air and can travel along the ground to an ignition source and flash back to vapour source.

10.4. Conditions to avoid:

Formation of sparks, glows, and strong heat.

10.5. Incompatible materials:

Oxidisers. Alkali. Acids

10.6. Hazardous decomposition products:

In case of extensive heating the mixture may form hazardous decomposition product such as oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

1.1. Information on toxicological effects:				
Hazard class	Data	Test	Data source	
Acute toxicity:				
Inhalation	LC_{50} (rat) = 125 mg/l/4H (Ethanol)	No info	IUCLID	
	$LC_{50}(rat) = 20 \text{ mg/l/8H} (Propan-2-ol)$	Literature	Supplier	
	LC_{50} (rat) > 29 ppm/2H (2-(2-Butoxyethoxy)ethanol)	OECD 403	ECHA	
	LC_{50} (rat) = 7559 ppm/6H (1-methoxy-2-propanol)	Literature	Supplier	
Dermal	LD_{50} (rabbit) = 20000 mg/kg (Ethanol)	Draize	IUCLID	
	LD_{50} (rabbit) = 12800 mg/l (Propan-2-ol)	Literature	Supplier	
	LD_{50} (rat) = 2700 mg/kg (2-(2-butoxy ethoxy)ethanol)	Literature	Supplier	
	LD_{50} (rabbit)= 13000 mg/kg (1-methoxy-2-propanol)	Literature	Supplier	
Oral	LD_{50} (rat) = 1780 mg/kg (Ethanol)	No info	IUCLID	
	LD_{50} (rat) = 5050 mg/kg (Propan-2-ol)	Literature	Supplier	
	LD_{50} (rat) = 5660 mg/kg (2-(2-butoxy ethoxy)ethanol)	Literature	Supplier	
	LD_{50} (rat)= 6100 mg/kg (1-methoxy-2-propanol)	Literature	Supplier	
Corrosion/irritation:	No skin irritation, none to moderate eye irritation, rabbit	OECD 404, 405	IUCLID	
	(Ethanol)			
	Eye irritation, rabbit (Propan-2-ol)	Draize	IUCLID	
	Eye irritation, mild skin irritation, rabbit (2-(2-	OECD 404, 405	ECHA	
	Butoxyethoxy)ethanol)	,		
	No skin or eye irritation, rabbit (1-methoxy-2-propanol)	Various	ECHA	
Sensitization:	No skin sensitization, guinea pig (Ethanol, propan-2-ol,	Various	IUCLID,	
	2-(2-Butoxyethoxy)ethanol, 1-methoxy-2-propanol)		ECHA	
CMR:	Data on mutagenicity are inconclusive (Ethanol)	Various	IUCLID	
	No CMR effects (Propan-2-ol)	Various	IUCLID	
	No mutagenic or reproductive effects (2-(2-	OECD 476, 415	ECHA	
	butoxyethoxy)ethanol)	,		
	No CMR effects (1-methoxy-2-propanol)	Various	ECHA	
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Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.

Symptoms:

Inhalation:Irritation of the respiratory tract. Headache, dizziness, coughing, laboured breathing and indisposition.Skin:May cause irritation, degreases skin. Can be absorbed through the skin and cause symptoms as described under "Ingestion".

Eyes: Irritation with redness, pain and blurred vision.

Ingestion: Irritating to the mouth and the gastrointestinal tract. Can be absorbed through the gastrointestinal tract and cause symptoms as described under "Ingestion".

Chronic effects: Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

SECTION 12: Ecological information

Aquatic	Data	Test (Media)	Data sourc
Fish	LC_{50} (Pimephales promelas, 96h) = 15300 mg/l (Ethanol)	No info (FW)	IUCLID
	LC_{50} (Fisk, 96h) = 9640 mg/l(Propan-2-ol)	Literature	Supplier
	LC_{50} (Fisk, 96h) = 1650 mg/l (2-(2-butoxy ethoxy)ethanol)	Literature	Supplier
	LC_{50} (Leuciscus idus, 96h) = 4600 mg/l (1-methoxy-2-propanol)	Literature	Supplier
Daphnia	EC_{50} (Daphnia magna, 48h) = 9268 - 14221 mg/l (Ethanol)	No info (FW)	IUCLID
-	EC_{50} (Krebsdyr, 48h) = 1400 mg/l (Propan-2-ol)	Literature	Supplier
	EC ₅₀ (Daphnia magna, 48h) > 100 mg/l (2-(2-	No info	IUCLID
	Butoxyethoxy)ethanol)		
	LC_{50} (Daphnia magna, 48h) = 500 mg/l mg/l (1-methoxy-2-	Literature	Supplier
	propanol)		
lgae	LC_{50} (Scenedesmus quadricauda, 7d) = 1400 mg/l (Propan-2-ol)	Literature	Supplier
	EC ₅₀ (Scenedesmus sub. 96h) >100 mg/l (2-(2-	OECD 201	ECHA
	Butoxyethoxy)ethanol)		
	LC_{50} (Pseudokirchnerella sub. 7d) = 1000 mg/l (1-methoxy-2-	Literature	Supplier
	propanol)		

12.2. Persistence and degradability:

Ethanol, propan-2-ol, 2-(2-Butoxyethoxy)ethanol and 1-methoxy-2-acetate are rapidly degradable (IUCLID, ECHA). **12.3. Bioaccumulative potential:**

Ethanol, propan-2-ol, 2-(2-Butoxyethoxy)ethanol and 1-methoxy-2-propanol: Log K_{ow} <1 – No bioaccumulation.

12.4. Mobility in soil:

Ethanol, propan-2-ol and 2-(2-Butoxyethoxy)ethanol: $K_{oc} < 5$ - Large mobility in soil.

12.5. Results of PBT and vPvB assessment:

The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

12.6. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

20 01 27 (mixture itself)

15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

14.1. UN-no.: 1263

- 14.2. UN proper shipping name: PAINT OR PAINT RELATED MATERIAL
- 14.3. Transport hazard class(es): 3

14.4. Packing group: II

14.5. Environmental hazards: No.

14.6. Special precautions for user: None.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code: Not relevant.

SECTION 15: Regulatory information

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

Must not be used by persons under 18 years of age.

The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).

15.2. Chemical Safety Assessment:

The product contains at least one substance with an exposure scenario. RMM and OC are incorporated into this SDS.

SECTION 16: Other information

Hazard statement mentioned in section 3:

H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

 EC_{50} = Effect Concentration 50 %

FW = Fresh Water

 LC_{50} = Lethal Concentration 50 %

 LD_{50} = Lethal Dose 50 %

NOEC = No Observed Effect Concentration

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA= European Chemical Agency Registration dossier

IUCLID = International Uniform ChemicaL Database Information

RTECS = Register of Toxic Effects of Chemical Substances

Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

Section 1 – Name of supplier and product.

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