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

1.1. Product identifier

EMI-Lac

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

Uses advised against

Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

Company name: ITW LLC & Co. KG
Street: Mühlackerstrasse 149
Place: D-75417 Mühlacker
Telephone: ++49(0)7041-96340 Telefax: ++49(0)7041-963429
e-mail: info@itwcp.de
Internet: www.itwcp.de

Responsible Department: Produktsicherheit Mo. - Do. 8.00 - 16.30 Fr. 8.00 - 14.00
Swiss Toxicological Information Centre - Téléphone : +41 44 251 51 51 (in Switzerland dial 145)
United Kingdom : National Poisons Information Service - Phone number : 8448920111
Österreich : Vergiftungsinformationszentrale Vienna - Telefon-Nummer : +43 1 406 43 43
Schweiz : Tox Info Suisse - Telefon-Nummer : +41 44 251 51 51
Italia : Centro Antiveleni, Roma - Numero di telefono : +39 06 305 4343
España : Instituto Nacional de Toxicología - Teléfono : +34 91 562 04 20

1.4. Emergency telephone number:

Deutschland: ++49(0)7041-96340

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

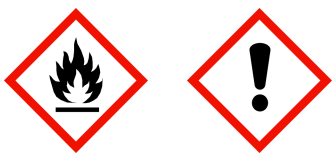
Regulation (EC) No. 1272/2008

Hazard components for labelling

n-butyl acetate, Acetone, propyl acetate

Signal word: Danger

Pictograms:



Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P211	Do not spray on an open flame or other ignition source.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of water.
P271	Use only outdoors or in a well-ventilated area.
P251	Do not pierce or burn, even after use.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
115-10-6	dimethyl ether			40-60%
	204-065-8	603-019-00-8		
	Flam. Gas 1; H220			
7440-50-8	Copper powder			10-25 %
	231-159-6			
	Flam. Sol. 1, Aquatic Acute 1; H228 H400			
109-60-4	propyl acetate			5-15 %
	203-686-1	607-024-00-6		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
67-64-1	acetone; propan-2-one; propanone			5-10%
	200-662-2	606-001-00-8		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
123-86-4	n-butyl acetate			5-10%
	204-658-1	607-025-00-1		
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
123-92-2	isopentyl acetate			1-10%
	204-662-3	607-130-00-2		
	Flam. Liq. 3; H226 EUH066			
107-98-2	1-Methoxy-2-propanol			1-5 %
	203-539-1		01-2119457435-35	
	Flam. Liq. 3, STOT SE 3; H226 H336			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water.

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Foam. Extinguishing powder.

Unsuitable extinguishing media

Water with tenside additive. Water.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Wear a self-contained breathing apparatus and chemical protective clothing.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
7440-50-8	Copper, dusts and mists (as Cu)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
123-92-2	Pentyl acetates: Isopentyl acetate	50	270		TWA (8 h)	WEL
		100	541		STEL (15 min)	WEL
109-60-4	n-Propyl acetate	200	849		TWA (8 h)	WEL
		250	1060		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

DIN EN 374 Tested protective gloves are to be worn: NBR (Nitrile rubber) For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. NBR (Nitrile rubber)

Skin protection

Protective clothing:

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	brown
Odour:	characteristic

Changes in the physical state

Initial boiling point and boiling range:	56 °C
Flash point:	<0 °C
Lower explosion limits:	2,5 vol. %
Upper explosion limits:	13,1 vol. %
Ignition temperature:	535 °C
Vapour pressure: (at 20 °C)	13,3 hPa
Vapour pressure: (at 50 °C)	60 hPa

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
109-60-4	propyl acetate				
	oral	LD50 9370 mg/kg	Rat	GESTIS	
	dermal	LD50 > 17800 mg/kg	Rabbit	GESTIS	
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50 5800 mg/kg	Rat	RTECS	
	dermal	LD50 20000 mg/kg	Rabbit	IUCLID	
	inhalation (4 h) vapour	LC50 76 mg/l	Rat		

Irritation and corrosivity

Irritating to eyes. Following inhalation: Lung irritation. Coughing. shortage of breath. After skin contact: irritant.

STOT-repeated exposure

Has degreasing effect on the skin. Frequently or prolonged contact with skin may cause dermal irritation.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
109-60-4	propyl acetate					
	Acute fish toxicity	LC50 60 mg/l	96 h	Pimephales promelas	GESTIS	
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50 5540 mg/l	96 h	Onchorhynchus mykiss		
	Acute crustacea toxicity	EC50 6100 mg/l	48 h	Daphnia magna		

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
115-10-6	dimethyl ether	0,1
109-60-4	propyl acetate	1,24
67-64-1	acetone; propan-2-one; propanone	-0,24

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 625
Limited quantity:	1 L
Transport category:	2
Tunnel restriction code:	D

Other applicable information (land transport)

E0

Inland waterways transport (ADN)

14.1. UN number:	UN1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L

Other applicable information (inland waterways transport)

E0

Marine transport (IMDG)

14.1. UN number:	UN1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2, see SP63

Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	See SP277
EmS:	F-D, S-U

Other applicable information (marine transport)

E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
Hazard label:	2.1

Special Provisions:	A145 A167
Limited quantity Passenger:	30 kg G
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Other applicable information (air transport)

E0

: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 10,2 %

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)