Safety Data Sheet

according to Regulation (EC) No 1907/2006

Demotec 95 Liquid

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

1.1. Product identifier

Demotec 95 Liquid

Product group: Liquid component

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

Use of the substance/mixture

Hoofcare system based on acrylic adhesive.

1.3. Details of the supplier of the safety data sheet

Company name:	Demotec Demel e.K.		
Street:	Brentanostraße 22		
Place:	D-61130 Nidderau		
Telephone:	+49 (0)6187-905670	Telefax:	+49 (0)6187-9056711
e-mail:	demotec@demotec.de		
Contact person:	Alexander Demel	Telephone:	+49 (0)6187-905670
e-mail:	demotec@demotec.de		
Internet:	www.demotec.de		

1.4. Emergency telephone number:

Germany / Berlin +49 (0)30 - 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: F - Highly flammable, Xi - Irritant
R phrases:
Highly flammable.
Danger of cumulative effects.
Irritating to respiratory system and skin.
May cause sensitisation by skin contact.

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

Hazard categories:
Flammable liquid: Flam. Liq. 2
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Respiratory/skin sensitization: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause respiratory irritation.

2.2. Label elements

Hazardous components which must be listed on the label

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
Hydroxypropylmethacrylat
1,4-Butandiol dimethacrylate
N,N-dimethyl-p-toluidine

Signal word: Danger

Pictograms: GHS02-GHS07

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture based on methyl methacrylate and accelerator.

Hazardous components

EC No / CAS No / Index No / REACH No	Chemical name / Classification according to Directive 67/548/EEC / Classification according to Regulation (EC) No. 1272/2008 [CLP]	Quantity
201-297-1 80-62-6 01-2119452498-28	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate F - Highly flammable, Xi - Irritant R11-37/38-43 Flam. Liq. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H224 H315 H317 H335	70 - < 75 %
248-666-3 27813-02-1	Hydroxypropylmethacrylat Xi - Irritant R36-43 Eye Irrit. 2, Skin Sens. 1; H319 H317	5 - < 10 %
218-218-1 2082-81-7	1,4-Butandiol dimethacrylate R43 Skin Sens. 1; H317	5 - < 10 %
202-805-4 99-97-8	N,N-dimethyl-p-toluidine T - Toxic R23/24/25-33-52-53 Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 3; H301 H311 H331 H373 H412	1 - < 5 %

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO_2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water. Full water jet

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

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. Take precautionary measures against static discharge. Vapours can form explosive mixtures with air.

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 heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Hoofcare system

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type		Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
Worker DNEL, long-term		inhalation		208 mg/m³
Worker DNEL, long-term		dermal		17 mg/kg bw/day

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. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and 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:	liquid		
Colour:	colourless		
Odour:	characteristic		
			Test method
pH-Value:		not applicable	
Changes in the physical state			
Melting point:		-48,2 °C	
Initial boiling point and boiling range:		100,3 °C	
Flash point:		10 °C	DIN 51755
Flammability			
Solid:		not applicable	
Gas:		not applicable	
Lower explosion limits:		2,1 vol. %	
Upper explosion limits:		12,5 vol. %	
Ignition temperature:		430 °C	DIN 51794
Auto-ignition temperature			
Solid:		not applicable	
Gas:		not applicable	
Decomposition temperature:		not determined	
Oxidizing properties			
Not oxidizing.			
Vapour pressure: (at 20 °C)		38,7 hPa	
Density (at 20 °C):		0,94 g/cm³	
Water solubility: (at 20 °C)		15,9 g/L	
Solubility in other solvents			
miscible with most organic solvents			
Partition coefficient:		1,38	
Viscosity / dynamic:		0,62 mPa·s	
Vapour density: (at 20 °C)		> 1	
Evaporation rate:		not determined	

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable, Ignition hazard.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalative vapour) 14,35 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate				
	oral	LD50	>5000 mg/kg	Rat	OECD 401
	dermal	LD50	>5000 mg/kg	Rabbit	
	inhalative vapour	LC50	29,8 mg/l	Rat	
27813-02-1	Hydroxypropylmethacrylat				
	oral	LD50	11200 mg/kg	Rat	
2082-81-7	1,4-Butandiol dimethacrylate				
	oral	LD50	> 10000 mg/kg	Rat	
	dermal	LD50	> 3000 mg/kg	Rabbit	
99-97-8	N,N-dimethyl-p-toluidine				
	oral	ATE	100 mg/kg		
	dermal	ATE	300 mg/kg		
	inhalative (4 h) vapour	LC50	1,4 mg/l	Rat	GESTIS
	inhalative aerosol	ATE	0,5 mg/l		

Irritation and corrosivity

Causes skin irritation.

Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate), (Hydroxypropylmethacrylat), (1,4-Butandiol dimethacrylate)

STOT-single exposure

May cause respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name / Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate					
	Acute fish toxicity	LC50	> 79 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50	> 110 mg/l	72 h	Selenastrum capricornutum	OECD 201
	Acute crustacea toxicity	EC50	69 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
	Crustacea toxicity	NOEC	37 mg/l	21 d	Daphnia magna (Big water flea)	OECD 202
27813-02-1	Hydroxypropylmethacrylat					
	Acute fish toxicity	LC50	493 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	> 130 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
	Acute bacteria toxicity	(> 97,2 mg/l)		3 h	Selenastrum capricornutum	OECD 201
2082-81-7	1,4-Butandiol dimethacrylate					
	Acute fish toxicity	LC50	32,5 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	7,51 mg/l	48 h	Daphnia magna (Big water flea)	OECD 211
	Crustacea toxicity	NOEC	7,51 mg/l		Selenastrum capricornutum	
99-97-8	N,N-dimethyl-p-toluidine					
	Acute fish toxicity	LC50	52 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	1,38
27813-02-1	Hydroxypropylmethacrylat	0,97
2082-81-7	1,4-Butandiol dimethacrylate	3,1
99-97-8	N,N-dimethyl-p-toluidine	2,81

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

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:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L
Transport category:	2
Hazard No:	339
Tunnel restriction code:	D/E

Other applicable information (land transport)

E2

Inland waterways transport (ADN)

14.1. UN number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L

Other applicable information (inland waterways transport)

E2

Marine transport (IMDG)

14.1. UN number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3

14.4. Packing group: II
Hazard label: 3
Special Provisions:
Limited quantity: 1 L
EmS: F-E, S-D

Other applicable information (marine transport)

E2

Air transport (ICAO)

14.1. UN number: UN 1247
14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

E2
Passenger-LQ: Y341

14.6. Special precautions for user

Warning: Combustible liquids.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 77,44 % (727,936 g/l)
2004/42/EC (VOC): 77,44 % (727,936 g/l)

Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class (D): 2 - water contaminating
Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant R-phrases (Number and full text)

11	Highly flammable.
23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
33	Danger of cumulative effects.
36	Irritating to eyes.
37/38	Irritating to respiratory system and skin.
43	May cause sensitisation by skin contact.
52	Harmful to aquatic organisms.
53	May cause long-term adverse effects in the aquatic environment.

Relevant H- and EUH-phrases (Number and full text)

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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