

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 1 of 10

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

#### 1.1. Product identifier

Demotec 90 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:	<a href="mailto:demotec@demotec.de">demotec@demotec.de</a>	
Contact person:	Alexander Demel	Telephone: +49 (0)6187-905670
e-mail:	demotec@demotec.de	
Internet:	<a href="http://www.demotec.de">www.demotec.de</a>	

#### 1.4. Emergency telephone number:

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 eyes, 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

Serious eye damage/eye irritation: Eye 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.

Causes serious eye irritation.

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Demotec 90 Liquid**Print date: 30.01.2015  
N,N-dimethyl-p-toluidine

Product code: 22451

Page 2 of 10

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.
H319	Causes serious eye irritation.
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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
201-297-1 80-62-6	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	75 - < 80 %
01-2119452498-28		
248-666-3 27813-02-1	Hydroxypropylmethacrylat Xi - Irritant R36-43 Eye Irrit. 2, Skin Sens. 1; H319 H317	20 - < 25 %
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**

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 3 of 10

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. When in doubt or if symptoms are observed, get medical advice.

### 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

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

#### Unsuitable extinguishing media

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

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 4 of 10

### 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/m <sup>3</sup>	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	Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
	Worker DNEL, long-term	inhalation		208 mg/m <sup>3</sup>
	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

Suitable eye protection: goggles.

#### 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

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 5 of 10

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	
		<b>Test method</b>
pH-Value:		not applicable
<b>Changes in the physical state</b>		
Melting point:		-48,2 °C
Initial boiling point and boiling range:		100,3 °C
Flash point:		10 °C DIN 51755
<b>Flammability</b>		
Solid:		not applicable
Gas:		not applicable
Lower explosion limits:		2,1 vol. %
Upper explosion limits:		12,5 vol. %
Ignition temperature:		430 °C DIN 51794
<b>Auto-ignition temperature</b>		
Solid:		not applicable
Gas:		not applicable
Decomposition temperature:		not determined
<b>Oxidizing properties</b>		
Not oxidizing.		
Vapour pressure: (at 20 °C)		38,7 hPa
Density (at 20 °C):		0,94 g/cm <sup>3</sup>
Water solubility: (at 20 °C)		15,9 g/L
<b>Solubility in other solvents</b>		
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
<b><u>9.2. Other information</u></b>		
Solid content:		not determined

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Demotec 90 Liquid**

Print date: 30.01.2015

Product code: 22451

Page 6 of 10

**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) 15,77 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	
99-97-8	N,N-dimethyl-p-toluidine	oral	ATE	100 mg/kg		GESTIS
		dermal	ATE	300 mg/kg		
		inhalative (4 h) vapour	LC50	1,4 mg/l	Rat	
		inhalative aerosol	ATE	0,5 mg/l		

**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

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

**STOT-single exposure**

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Demotec 90 Liquid**Print date: 30.01.2015  
methacrylate)

Product code: 22451

Page 7 of 10

**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 1999/45/EC.

**SECTION 12: Ecological information****12.1. Toxicity**

The product is not: Ecotoxic.

CAS No	Chemical name	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
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
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.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 8 of 10

### 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)

<b><u>14.1. UN number:</u></b>	UN 1247
<b><u>14.2. UN proper shipping name:</u></b>	METHYL METHACRYLATE MONOMER, STABILIZED
<b><u>14.3. Transport hazard class(es):</u></b>	3
<b><u>14.4. Packing group:</u></b>	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)

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

#### Other applicable information (inland waterways transport)

E2

### Marine transport (IMDG)

<b><u>14.1. UN number:</u></b>	UN 1247
<b><u>14.2. UN proper shipping name:</u></b>	METHYL METHACRYLATE MONOMER, STABILIZED
<b><u>14.3. Transport hazard class(es):</u></b>	3
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	3
Special Provisions:	
Limited quantity:	1 L
EmS:	F-E, S-D

#### Other applicable information (marine transport)

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Demotec 90 Liquid**Print date: 30.01.2015  
E2

Product code: 22451

Page 9 of 10

**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**

No information available.

**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): 80 % (752 g/l)  
 2004/42/EC (VOC): 80 % (752 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%

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Demotec 90 Liquid

Print date: 30.01.2015

Product code: 22451

Page 10 of 10

### 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.)*