Crea	Created: 19.01.2012, Revision 14.04.2011 Version 01 Page 1 / 10				
1 Ide	1 Identification of the substance / preparation and of the company				
1.1	Product identifier				
		Clearbond Part A Article number MMB.C.S50			
1.2	Relevant identified uses of the	substance or mixture and uses advised against			
1.2.1	Relevant uses				
		Adhesive			
1.2.2	2 Uses advised against				
	-	None known.			
1.3	Details of the supplier of the sa	fety data sheet			
	Company	Marston Domsel GmbH			
		Bergheimer Str. 15 53909 Zülpich / GERMANY Phone 0 22 52 / 94 15 - 0 Fax 0 22 52 / 17 44 Homepage www.marston-domsel.de E-mail info@marston-domsel.de			
	Address enquiries to				
	Technical information	info@marston-domsel.de			
	Safety Data Sheet	sdb@chemiebuero.de			
1.4	Emergency phone				
	Advisory body	+49 (0) 89-19240 (24h) (english)			
2 Ha	azards identification				
2.1	Classification of the substance	or mixture			
2.1.1	Classification according to Reg Hazard pictograms	ulation (EC) No 1272/2008 [CLP]			

Signal word





Flam. Liq. 2 - H225 Highly flammable liquid and vapour. Skin Sens. 1 - H317 May cause an allergic skin reaction. Skin Irrit. 2 - H315 Causes skin irritation. Eye Irrit. 2 - H319 Causes serious eye irritation. STOT SE 3 - H335 May cause respiratory irritation. Classification according to conversion table Annex VII 1272/2008/EC

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols





R-phrases

R 11: Highly flammable. R 36/37/38: Irritating to eyes, respiratory system and skin.

R 43: May cause sensitisation by skin contact.

The product is classified and required to be labelled in accordance with EC-Directives

MARSTON-DOMSEL

Crea	ated: 19.01.2012, Revision 14.04	2011 Version 01 Page 2	/ 10
2.2	Label elements		
	Labelling according to R	gulation 67/548/EEC or 1999/45/EC	
	Hazard symbols	沙	
		Highly flammable Irritant	
	Contains:	Methyl methacrylate	
		2-Hydroxyethyl methacrylate	
	R-phrases	R 11: Highly flammable. R 36/37/38: Irritating to eyes, respiratory system and skin. R 43: May cause sensitisation by skin contact.	
	S-phrases	 S 2: Keep out of the reach of children. S 16: Keep away from sources of ignition - No smoking. S 24: Avoid contact with skin. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medica advice. S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S 51: Use only in well-ventilated areas. S 46: If swallowed, seek medical advice immediately and show this container or label. 	I
	Special labelling	not applicable	
2.3	Other hazards		
	Other hazards	No particular hazards known.	

3 Composition / Information on ingredients

3.1 Product-type:

The product in question is a mixture.

Range [%]	Substance
20 - <40	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
	GHS/CLP: Flam. Liq. 2 - H225 - STOT SE 3 - H335 - Skin Irrit. 2 - H315 - Skin Sens. 1 - H317
	EEC: F-Xi, R 11-37/38-43
20 - <40	2-Phenoxyethyl methacrylate
	CAS: 10595-06-9, EINECS/ELINCS: 234-201-1
	GHS/CLP:
	EEC: Xi, R 36/38
1 - <20	Tetrahydrofurfuryl-2-methacrylate
	CAS: 2455-24-5, EINECS/ELINCS: 219-529-5
	GHS/CLP:
	EEC: Xi, R 36/37/38
1 - <20	2-Hydroxyethyl methacrylate
	CAS: 868-77-9, EINECS/ELINCS: 212-782-2, EU-INDEX: 607-124-00-X
	GHS/CLP: Eye Irrit. 2 - H319 - Skin Irrit. 2 - H315 - Skin Sens. 1 - H317
	EEC: Xi, R 36/38-43
1 - <5	Methacrylic acid
	CAS: 79-41-4, EINECS/ELINCS: 201-204-4, EU-INDEX: 607-088-00-5
	GHS/CLP: Acute Tox. 4 - H312 - Acute Tox. 4 - H302 - Skin Corr. 1A - H314 - STOT SE 3 - H335
	EEC: C, R 21/22-35
0,1 - <1	Cumene hydroperoxide
	CAS: 80-15-9, EINECS/ELINCS: 201-254-7, EU-INDEX: 617-002-00-8
	GHS/CLP: Org. Perox. E - H242 - Acute Tox. 3 - H331 - Acute Tox. 4 - H302 H312 - STOT RE 2 - H373 - Skin
	Corr. 1B - H314 - Aquatic Chronic 2 - H411
	EEC: O-T-N, R 7-21/22-23-48/20/22-34-51/53

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%. For the wording of the listed risk phrases refer to section 16.

Marston Domsel GmbH 53909 Zülpich

Crea	ated: 19.01.2012, Revision 14.04.2011	Ve	ersion 01	Page 3 / 10
4 Fi	rst aid measures			
4.1	Description of first aid measures General information	Remove contaminated soaked clothing immediately and dispose of	safely.	
	Inhalation	Ensure supply of fresh air.		
		In the event of symptoms seek for medical treatment.		
	Skin contact	In case of contact with skin wash off immediately with soap and wate Consult a doctor if skin irritation persists.	er.	
	Eye contact	In case of contact with eyes rinse thoroughly with plenty of water and	d seek medic	cal advice.
	Ingestion	Consult a doctor immediately.		
		Do not induce vomiting.		
		Rinse out mouth and give plenty of water to drink.		
4.2	Most important symptoms and ef	fects, both acute and delayed No informations available.		
4.3	Indication of any immediate med	cal attention and special treatment needed		
		Treat symptomatically.		
5 Fi	re-fighting measures			
5.1	Extinguishing media			
	Suitable extinguishing media	Carbon dioxide. Water spray jet. Dry powder.		
		Foam.		
	Extinguishing media that must not be used	Full water jet.		
5.2	Special hazards arising from the	substance or mixture		
		Unknown risk of formation of toxic pyrolysis products.		
5.3	Advice for firefighters			
	······································	Use self-contained breathing apparatus.		
		Fire residues and contaminated firefighting water must be disposed	of in accorda	ance within
		the local regulations.		
		Cool containers at risk with water spray jet.		
6 Ac	ccidental release measures			
6.1	Personal precautions, protective	equipment and emergency procedures		
		Keep away from all sources of ignition.		
		Ensure adequate ventillation.		
		High risk of slipping due to leakage/spillage of product. Use personal protective clothing.		
6.2	Environmental precautions			
		Prevent spread over a wide area (e.g. by containment or oil barriers) Do not discharge into the drains/surface waters/groundwater.).	
6.3	Methods and material for contain	ment and cleaning up		
		Take up mechanically.		
		Take up residues with absorbent material (e.g. sand).		
		Dispose of absorbed material in accordance within the regulations.		
6.4	Reference to other sections			
-		See section 8+13		

MARSTON-DOMSEL

Crea	ated: 19.01.2012, Revision 14.04.2011		Version 01	Page 4 / 10
7 Ha	andling and storage			
7.1	Precautions for safe handling			
		Use only in well-ventilated areas. Vacuuming in situ required.		
		Vapours can form an explosive mixture with air. Keep away from all sources of ignition - Refrain from smoking. Ignitable mixtures can be formed in the empty container.		
7.2	Conditions for safe storage, including any incompatibilities			
		Keep only in original container.		
		Do not store together with oxidizing agents.		
		Keep container tightly closed. Keep container in a well-ventilated place. Protect from heat/overheating.		
7.3	Specific end use(s)			
		See product use, section 1.2		

8 Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational

exposure limits to be monitored (GB)		
Range [%]	Substance	
20 - <40 Methyl methacrylate		
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6	
	Long-term exposure: 50 ppm, 208 mg/m ³	
	Short-term exposure (15-minute): 100 ppm, 416 mg/m ³	
1 - <5 Methacrylic acid		
	CAS: 79-41-4, EINECS/ELINCS: 201-204-4, EU-INDEX: 607-088-00-5	
	Long-term exposure: 20 ppm, 72 mg/m ³	
	Short-term exposure (15-minute): 40 ppm, 143 mg/m ³	

Ingredients with occupational exposure limits to be monitored (EU)

expedence minus to		
Range [%]	Substance / EC LIMIT VALUES	
20 - <40	Methyl methacrylate	
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6	
	Eight hours: 50 ppm	
	Short-term (15-minute): 100 ppm	

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3.2	Exposure controls			
	Additional advice on system design	Ensure adequate ventilation on workstation.		
	Eye protection	Safety glasses.		
	Hand protection	The details concerned are recommendations. Please co information. In full contact Butyl rubber, >480 min (EN 374). In splash contact Butyl rubber, >120 min (EN 374).	ntact the glove supplier	for further
	Skin protection	Light protective clothing.		
	Other	Personal protective equipment should be selected speci- depending on concentration and quantity of the hazardou resistance of these equipments to chemicals should be a supplier. Do not inhale vapours. Avoid contact with eyes and skin.	us substances handled	The
		Remove contaminated soaked clothing immediately and Do not eat, drink, smoke or take drugs at work. After worktime and before work breaks the affected skin Use barrier skin cream.		hly cleaned.
	Respiratory protection	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter AX.		
	Thermal hazards	No informations available.		

not determined

environmental exposition 9 Physical and chemical properties

Delimitation and monitoring of the

L		
9.1	.1 Information on basic physical and chemical properties	
	Form	viscous
		liquid
	Color	not determined
	Odor	characteristic
	Odour threshold	not determined
	pH-value	not applicable
	pH-value [1%]	not applicable
	Boiling point [°C]	not determined
	Flash point [°C]	15
	Flammability [°C]	not determined
	Lower explosion limit	not determined
	Upper explosion limit	not determined
	Oxidizing properties	no
	Vapour pressure/gas pressure [kPa]	not determined
	Density [g/ml]	not determined
	Bulk density [kg/m³]	not applicable
	Solubility in water	immiscible
	Partition coefficient [n-octanol/water]	not determined
	Viscosity	not determined
	Relative vapour density determined in air	not determined
	Evaporation speed	not determined
	Melting point [°C]	not determined
	Autoignition temperature [°C]	not determined
	Decomposition temperature	not determined
9.2	Other information	

No informations available.

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10 Stability and reactivity

Created: 19.01.2012, Revision 14.04.2011

10.1 Reactivity

See section 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong alkalies and oxidizing agents. Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting. Reactions with strong acids.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See section 7

10.6 Hazardous decomposition products

Flammable gases/vapours.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%] Substance
0,1 - <1 Cumene hydroperoxide, CAS: 80-15-9
LC50, inhalative, Rat: 220 ppm 4h IUCLID.
LD50, oral, Rat: 382 mg/kg IUCLID.
1 - <20 2-Hydroxyethyl methacrylate, CAS: 868-77-9
LD50, dermal, Rabbit: > 3000 mg/kg (IUCLID).
LD50, oral, Rat: 5564 mg/kg (IUCLID).
1 - <5 Methacrylic acid, CAS: 79-41-4
LD50, oral, Rat: 1060 mg/kg.
LD50, dermal, Rabbit: 500 - 1000 mg/kg.
LC50, inhalative, Rat: 7,1 mg/l 4h.
20 - <40 Methyl methacrylate, CAS: 80-62-6
LD50, oral, Rat: 7872 mg/kg.
LD50, dermal, Rabbit: > 5000 mg/kg.
LC50, inhalative, Rat: 78000 mg/m³ 4h.

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	
	Toxicological data of

Toxicological data of complete product are not available. The product was classified on the basis of the calculation procedure of the preparation directive.

12 Ecological information

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12.1 Toxicity

Range [%]	Substance
0,1 - <1	Cumene hydroperoxide, CAS: 80-15-9
	LC50, (96h), Oncorhynchus mykiss: 3,9 mg/l. M=1
	EC50, (24h), Daphnia magna: 7 mg/l. M=1
1 - <20	2-Hydroxyethyl methacrylate, CAS: 868-77-9
	LC50, (96h), Pimephales promelas: 227 mg/L (IUCLID).
	EC50, (96h), Pimephales promelas: 227 mg/L (IUCLID).
1 - <5	Methacrylic acid, CAS: 79-41-4
	EC50, (24h), Daphnia magna: > 100 - 180 mg/l.
	EC50, (96h), Algae: 0,59 mg/l.
20 - <40	Methyl methacrylate, CAS: 80-62-6
	LC50, (96h), fish: 191 mg/l.
	EC50, (48h), Daphnia magna: 69 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No informations available.

12.4 Mobility in soil

No informations available.

12.5 Results of PBT and vPvB assessment

No informations available.

12.6 Other adverse effects

Ecological data of complete product are not available. Do not discharge product unmonitored into the environment or into the drainage. No classification on the basis of the calculation procedure of the preparation directive.

13 Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

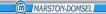
Product

	Dispose of as hazardous waste. Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	080409*
Contaminated packaging	
	Uncontaminated packaging may be taken for recycling.
	Packaging that cannot be cleaned should be disposed of as for product.
Waste no. (recommended)	150110*

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14 T	ransport information			
4.1	UN number			
	See section 14.2 in accordance with UN	shipping name		
4.2	UN proper shipping name			
	Transport by land according to ADR/RID	UN 1133 ADHESIVES 3 II		
	- Classification Code	F1		
	- Label	•		
	- ADR LQ	51		
	- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D/E)		
	Inland navigation (ADN)	UN 1133 ADHESIVES 3 II		
	- Classification Code	F1		
	- Label			
	Marine transport in accordance with IMDG	UN 1133 Adhesives 3 II		
	- EMS	F-E, S-D		
	- Label			
	- IMDG LQ	51		
	Air transport in accordance with IATA	UN 1133 Adhesives 3 II		
	- Label			
4.3	Transport hazard class(es)	V		
	- • • •			

See section 14.2 in accordance with UN shipping name

14.4 Packing group

See section 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See section 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under section 6 to 8.

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

No informations available.

5.1 Safety, health and environment	al regulations/legislation specific for the substance or mixture
EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2012).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

15.2 Chemical safety assessment

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

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16 Other informations		
6.1 R-phrases (section 03)		
	R 11: Highly flammable.	
	R 37/38: Irritating to respiratory system and skin.	
	R 43: May cause sensitisation by skin contact. R 36/38: Irritating to eyes and skin.	
	R 36/37/38: Irritating to eyes, respiratory system and skin.	
	R 35: Causes severe burns. R 21/22: Harmful in contact with skin and if swallowed.	
	R 7: May cause fire.	
	R 23: Toxic by inhalation. R 48/20/22: Harmful - danger of serious damage to health by prolonged exposi	ure through
	inhalation and if swallowed.	are anough
	R 34: Causes burns.	ho oquatio
	R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in t environment.	ne aqualic
6.2 Hazard statements (section	on 03)	
	H225 Highly flammable liquid and vapour.	
	H335 May cause respiratory irritation. H315 Causes skin irritation.	
	H317 May cause an allergic skin reaction.	
	H319 Causes serious eye irritation. H312 Harmful in contact with skin.	
	H302 Harmful if swallowed.	
	H314 Causes severe skin burns and eye damage. H242 Heating may cause a fire.	
	H331 Toxic if inhaled.	
	H302 H312 Harmful if swallowed or in contact with skin.	
	H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.	
6.3 Abbreviations and acrony	/ms:	
	ADR = Accord européen relatif au transport international des marchandises Da Route	angereuses par
	RID = Règlement concernant le transport international ferroviaire de marchand	lises
	dangereuses	
	ADN = Accord européen relatif au transport international des marchandises da voie de navigation intérieure	ngereuses par
	CAS = Chemical Abstracts Service	
	CLP = Classification, Labelling and Packaging DMEL = Derived Minimum Effect Level	
	DNEL = Derived Minimum Enect Level	
	EC50 = Median effective concentration	
	ECB = European Chemicals Bureau EEC = European Economic Community	
	EINECS = European Inventory of Existing Commercial Chemical Substances	
	ELINCS = European List of Notified Chemical Substances GHS = Globally Harmonized System of Classification and Labelling of Chemica	ale
	IATA = International Air Transport Association	uio
	IBC-Code = International Code for the Construction and Equipment of Ships ca	arrying
	Dangerous Chemicals in Bulk IC50 = Inhibition concentration, 50%	
	IMDG = International Maritime Code for Dangerous Goods	
	IUCLID = International Uniform ChemicaL Information Database LC50 = Lethal concentration, 50%	
	LD50 = Median lethal dose	
	MARPOL = International Convention for the Prevention of Marine Pollution fror PBT = Persistent, Bioaccumulative and Toxic substance	n Ships
	PNEC = Predicted No-Effect Concentration	
	PNEC = Predicted No-Effect Concentration REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals	
	PNEC = Predicted No-Effect Concentration REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals TLV®/TWA = Threshold limit value – time-weighted average	
	PNEC = Predicted No-Effect Concentration REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals	

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Modified position

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16.4	Other informations Observe employment restrictions for people	yes		
	VOC (1999/13/CE)	not determined		
	Customs Tariff	not determined		

none

www.chemiebuero.de, Phone +49 (0)941-566-398 (-455), E-mail info@chemiebuero.de, v. 2012-01-18a



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1 Id	entification of the substance /	preparation and of the company		
1.1	Product identifier			
		Clearbond Part B Article number MMB.C.S50		
1.2	Relevant identified uses of t	he substance or mixture and uses advised against		
1.2.1	Relevant uses			
		Adhesive		
1.2.2	2 Uses advised against			
		None known.		
1.3	.3 Details of the supplier of the safety data sheet			
	Company	Marston Domsel GmbH		
		Bergheimer Str. 15 53909 Zülpich / GERMANY Phone 0 22 52 / 94 15 - 0 Fax 0 22 52 / 17 44 Homepage www.marston-domsel.de E-mail info@marston-domsel.de		
	Address enquiries to			
	Technical information	info@marston-domsel.de		
	Safety Data Sheet	sdb@chemiebuero.de		
1.4	Emergency phone			
	Advisory body	+49 (0) 89-19240 (24h) (english)		
2 Ha	azards identification			

2.1 Classification of the substance or mixture

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

Hazard pictograms

Signal word

 $\mathbf{\cdot}$

WARNING Skin Sens. 1 - H317 May cause an allergic skin reaction. Skin Irrit. 2 - H315 Causes skin irritation. Eye Irrit. 2 - H319 Causes serious eye irritation. STOT SE 3 - H335 May cause respiratory irritation.

Classification according to conversion table Annex VII 1272/2008/EC

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols



R-phrases

R 36/37/38: Irritating to eyes, respiratory system and skin. R 43: May cause sensitisation by skin contact. The product is classified and required to be labelled in accordance with EC-Directives



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2.2 Label elements

Labelling according to Regulation 67/548/EEC or 1999/45/EC

	Hazard symbols	Irritant
	Contains:	Methyl methacrylate
	R-phrases	R 36/37/38: Irritating to eyes, respiratory system and skin. R 43: May cause sensitisation by skin contact.
	S-phrases	 S 2: Keep out of the reach of children. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37: Wear suitable protective clothing and gloves. S 46: If swallowed, seek medical advice immediately and show this container or label.
	Special labelling	none
2.3	Other hazards	

Other hazards

No particular hazards known.

3 Composition / Information on ingredients

3.1 Product-type:

The product in question is a mixture.

Range [%]	Substance
40 - <60	Benzyl methacrylate
	CAS: 2495-37-6, EINECS/ELINCS: 219-674-4, EU-INDEX: 607-134-00-4
	GHS/CLP: Eye Irrit. 2 - H319 - Skin Irrit. 2 - H315 - STOT SE 3 - H335
	EEC: Xi, R 36/37/38
1 - <20	exo-1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl methacrylate
	CAS: 7534-94-3, EINECS/ELINCS: 231-403-1, EU-INDEX: 607-134-00-4
	GHS/CLP: Eye Irrit. 2 - H319 - Skin Irrit. 2 - H315 - STOT SE 3 - H335
	EEC: Xi, R 36/37/38
1 - <5	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
	GHS/CLP: Flam. Liq. 2 - H225 - STOT SE 3 - H335 - Skin Irrit. 2 - H315 - Skin Sens. 1 - H317
	EEC: F-Xi, R 11-37/38-43
0,1 - <1	Trimethylenediamine
	CAS: 109-76-2, EINECS/ELINCS: 203-702-7
	GHS/CLP: Flam. Liq. 3 - H226 - Acute Tox. 2 - H310 - Acute Tox. 4 - H302 - H314
	EEC: T-C, R 10-24-35-22-52/53

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%. For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1	Description of first aid measures General information	Change soaked clothing.
	Inhalation	Ensure supply of fresh air.
		In the event of symptoms seek for medical treatment.
	Skin contact	In case of contact with skin wash off immediately with soap and water.
		Consult a doctor if skin irritation persists.
	Eye contact	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
	Ingestion	Consult a doctor immediately.
		Do not induce vomiting.
		Rinse out mouth and give plenty of water to drink.

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4.2	Most important symptoms and e	ffects, both acute and delayed No informations available.		
4.3	Indication of any immediate med	lical attention and special treatment needed		
	· · · · · · · · · · · · · · · · · · ·	Treat symptomatically.		
5 Fi	re-fighting measures			
5.1	Extinguishing media			
	Suitable extinguishing media	Carbon dioxide. Water spray jet. Dry powder. Foam.		
	Extinguishing media that must not be used	Full water jet.		
5.2	Special hazards arising from the	substance or mixture		
		Unknown risk of formation of toxic pyrolysis products.		
5.3	Advice for firefighters			
		Use self-contained breathing apparatus.		
		Do not inhale explosion and/or combustion gases. Fire residues and contaminated firefighting water must be dispose	ad of in accorda	nce within
		the local regulations.		
6 Ac	cidental release measures			
6.1	Personal precautions, protective	equipment and emergency procedures		
		Keep away from all sources of ignition. High risk of slipping due to leakage/spillage of product. Use personal protective equipment (protective gloves). Ensure adequate ventillation.		
6.2	Environmental precautions			
		Prevent spread over a wide area (e.g. by containment or oil barrier Do not discharge into the drains/surface waters/groundwater.	rs).	
6.3	Methods and material for contain	nment and cleaning up		
		Pick up with absorbent material (e.g. sand, sawdust, universal absearth). Dispose of absorbed material in accordance within the regulations		aceous
6.4	Reference to other sections			
0.4		See section 8+13		
7 Ha	andling and storage			
7.1	Precautions for safe handling			
	i roodallono for ouro nanaling	Use only in well-ventilated areas.		
		No special measures necessary if used correctly.		
		Keep away from sources of ignition - refrain from smoking.		
7.2	Conditions for safe storage, incl	uding any incompatibilities Keep only in original container.		
		Do not store together with oxidizing agents.		
		Keep container tightly closed. Keep container in a well-ventilated place. Keep in a cool place. Store in a dry place.		
7.3	Specific end use(s)	See product use, section 1.2		

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8 Exposure controls / personal protection		
8.1 Control parameters Ingredients with occupational exposure limits to be monitored (GB)		
Range [%] Substance		

1 - <5 Methyl methacrylate

CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
Long-term exposure: 50 ppm, 208 mg/m ³
Short-term exposure (15-minute): 100 ppm, 416 mg/m ³

Ingredients with occupational vposure limits to be monitored (FLI)

exposure minus to be monitored (EO)					
Range [%] Substance / EC LIMIT VALUES					
1 - <5 Methyl methacrylate					
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6				
Eight hours: 50 ppm					
	Short-term (15-minute): 100 ppm				

8.2 Exposure controls

Ensure adequate ventilation on workstation.
Safety glasses.
The details concerned are recommendations. Please contact the glove supplier for further nformation. n full contact Vitrile rubber, >480 min (EN 374). n splash contact Vitrile rubber, >480 min (EN 374).
ight protective clothing
Avoid contact with eyes and skin. Do not inhale vapours. Personal protective equipment should be selected specifically for the working place, lepending on concentration and quantity of the hazardous substances handled. The esistance of these equipments to chemicals should be ascertained with the respective supplier.
Remove soiled or soaked clothing. Do not eat, drink, smoke or take drugs at work. Vash hands before breaks and after work. Jse barrier skin cream.
Breathing apparatus in the event of high concentrations.
No informations available.
See section 6+7.

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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

	······································	
	Form	liquid
	Odor	characteristic
	Odour threshold	not determined
	pH-value	not applicable
	pH-value [1%]	not applicable
	Boiling point [°C]	not determined
	Flash point [°C]	not determined
	Flammability [°C]	not determined
	Lower explosion limit	not applicable
	Upper explosion limit	not applicable
	Oxidizing properties	no
	Vapour pressure/gas pressure [kPa]	not determined
	Density [g/ml]	not determined
	Bulk density [kg/m³]	not applicable
	Solubility in water	virtually insoluble
	Partition coefficient [n-octanol/water]	not determined
	Viscosity	not applicable
	Relative vapour density determined in air	not determined
	Evaporation speed	not determined
	Melting point [°C]	not determined
	Autoignition temperature [°C]	not determined
	Decomposition temperature	not determined
9.2	Other information	

none

10 Stability and reactivity

10.1 Reactivity

See section 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents. Reactions with reducing agents.

10.4 Conditions to avoid

See section 7.2. Strong heating.

10.5 Incompatible materials

See section 7

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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11 Toxicological inform	mation				
11.1 Information on to	oxicological effe	ects			
Acute toxicity	-				
Range [%]	Substance				
40 - <60	Benzyl methacryla	te, CAS: 2495-37-6			
	LD50, oral, Rat: 50	000 mg/kg (Lit.).			
1 - <5	Methyl methacryla	te, CAS: 80-62-6			
	LD50, oral, Rat: 78	372 mg/kg.			
	LD50, dermal, Rat	obit: > 5000 mg/kg.			
	LC50, inhalative, F	Rat: 78000 mg/m³ 4h.			
0,1 - <1	Trimethylenediami	ne, CAS: 109-76-2			
	LD50, oral, Rat: 70	00 mg/kg (Lit.).			
	LD50, dermal, Ral	obit: 177 mg/kg (Lit.).			
Serious eye damag	e/irritation	not determined			
Skin corrosion/irrit	ation	not determined			
Respiratory or skin	sensitisation	not determined			
Specific target orga single exposure	an toxicity —	not determined			
Specific target orga repeated exposure	an toxicity —	not determined			
Mutagenicity		not determined			

not determined

not determined

Toxicological data of complete product are not available. The product was classified on the basis of the calculation procedure of the preparation directive.

12 Ecological information

Reproduction toxicity

Carcinogenicity

General remarks

12.1 Toxicity

Range [%]	Substance	
40 - <60	Benzyl methacrylate, CAS: 2495-37-6	
	LC50, (96h), Pimephales promelas: 4,7 mg/l (Lit.).	
1 - <5 Methyl methacrylate, CAS: 80-62-6		
	LC50, (96h), fish: 191 mg/l.	
	EC50, (48h), Daphnia magna: 69 mg/l.	
0,1 - <1	Trimethylenediamine, CAS: 109-76-2	
	LC50, (96h), Pimephales promelas: 1190 mg/l (Lit.).	
EC50, (48h), Daphnia magna: 27 mg/l (Lit.).		

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No informations available.

12.4 Mobility in soil

No informations available.

12.5 Results of PBT and vPvB assessment

No informations available.

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12.6 Other adverse effects

None known.

13 Disposal considerations	

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

	Dispose of as hazardous waste. Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	080409*
Contaminated packaging	
	Packaging that cannot be cleaned should be disposed of as for product.
	Uncontaminated packaging may be taken for recycling.
Waste no. (recommended)	150110*

14 Transport information

14.1 UN number

See section 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with	NOT CLASSIFIED AS "DANGEROUS GOODS"

IMDG

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See section 14.2 in accordance with UN shipping name

14.4 Packing group

See section 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See section 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under section 6 to 8.

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

not applicable

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15 R	egulatory information			
15.1	Safety, health and environmenta	Il regulations/legislation specific for the substance or mixture		
	EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC		
	TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2012).		
	NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4		
5.2	Chemical safety assessment			
		Chemical safety assessments for substances in this mixture were not carried out.		
16 C	ther informations			
6.1	R-phrases (section 03)			
		R 11: Highly flammable.		
		R 37/38: Irritating to respiratory system and skin. R 43: May cause sensitisation by skin contact.		
		R 10: Flammable.		
		R 24: Toxic in contact with skin. R 35: Causes severe burns.		
		R 22: Harmful if swallowed.		
		R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		
		R 36/37/38: Irritating to eyes, respiratory system and skin.		
6.2	Hazard statements (section 03)			
		H225 Highly flammable liquid and vapour. H335 May cause respiratory irritation.		
		H315 Causes skin irritation.		
		H317 May cause an allergic skin reaction.		
		H226 Flammable liquid and vapour. H310 Fatal in contact with skin.		
		H302 Harmful if swallowed.		
		H314 Causes severe skin burns and eye damage. H319 Causes serious eye irritation.		
6.3	Abbreviations and acronyms:			
		ADR = Accord européen relatif au transport international des marchandises Dangereuses pa Route		
		RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses		
		ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure CAS = Chemical Abstracts Service		
		CLP = Classification, Labelling and Packaging		
		DMEL = Derived Minimum Effect Level DNEL = Derived No Effect Level		
		EC50 = Median effective concentration		
		ECB = European Chemicals Bureau		
		EEC = European Economic Community EINECS = European Inventory of Existing Commercial Chemical Substances		
		ELINCS = European List of Notified Chemical Substances		
		GHS = Globally Harmonized System of Classification and Labelling of Chemicals		
		IATA = International Air Transport Association IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk		
		IC50 = Inhibition concentration, 50%		
		IMDG = International Maritime Code for Dangerous Goods		
		IUCLID = International Uniform ChemicaL Information Database LC50 = Lethal concentration, 50%		
		LD50 = Median lethal dose		
		MARPOL = International Convention for the Prevention of Marine Pollution from Ships PBT = Persistent, Bioaccumulative and Toxic substance PNEC = Predicted No-Effect Concentration		
		REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals		
		TLV®/TWA = Threshold limit value – time-weighted average TLV®STEL = Threshold limit value – short-time exposure limit		
		VOC = Volatile Organic Compounds		
		vPvB = very Persistent and very Bioaccumulative		

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Modified position

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16.4 Other informations Observe employment restrictions fo people	yes		
VOC (1999/13/CE)	not determined		
Customs Tariff	not determined		

none

www.chemiebuero.de, Phone +49 (0)941-566-398 (-455), E-mail info@chemiebuero.de, v. 2012-01-18a

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