

**Trade name: Usig Metal Primer**  
**Safety data sheet in accordance with 91/155/EEC**  
 Date of printing : 14.07.2009

**01. Identification**

01.01 Product details	
01.01.01. Trade name	Usig Metal Primer
01.02. Identification of the manufacturer	
01.02.01. Address	ERKODENT Erich Kopp GmbH, Siemensstr. 3, D-72285 Pfalzgrafenweiler
01.02.02. Information provided by	Chemie
01.02.03. Telephone number	Tel.: (+49) (0) 7445 / 85 01 - 0, Fax: (+49) (0) 7445 / 20 92
01.02.04. Emergency telephone number :	

**02. Composition/information on ingredients**

02.01. Chemical characterization	Methylmethacrylat
02.02. Substance / product identification	
02.03. Hazardous ingredients	Methylmethacrylat, CAS no.: 80-62-6; EINECS no.: 201-297-1; Xi, F, R 11, 37/38, 43 ; 75 – 100 %
02.04. Additional information	-

**03. Hazards possibilities**

03.01. Hazard designation	Highly flammable, Irritating to respiratory system and skin., May cause sensitization by skin contact.
03.02. Particular information pertaining specific risk for human / environment	

**04. First aid measures**

04.01. General Information	Remove contaminated clothing immediately and dispose of safely.
04.02. First aid measures / inhalation.	Remove the casualty into fresh air and keep him calm., Take medical treatment.
04.03. First aid measures / skin contact.	In case of contact with skin wash off with warm water., Consult a doctor if skin irritation persists.
04.04. First aid measures / eye contact.	Separate eyelids, wash the eyes thoroughly with water (15 min.), In case of irritation consult an oculist.
04.05. First aid measures / ingestion.	Rinse out mouth and give plenty of water to drink., Do not induce vomiting., Summon a doctor immediately.
04.06. Advice to doctor	-

**05. Fire-fighting measures**

05.01. Suitable extinguishing media	foam, dry powder, carbon dioxide.,
05.02. Extinguishing media that must not be used for safety reasons	Full water jet
05.03. Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases.	-
05.04. Special protective equipment for firefighting	Use self-contained breathing apparatus.
05.05. Additional informations (chapter 5)	Cool endangered containers with water spray jet., Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

**06. Accidental release measures**

06.01. personal precautions.	Use personal protective clothing., Keep away sources of ignition., Ensure adequate ventilation., Use breathing apparatus if exposed to vapours/dust/aerosol., Refer to protective measures listed in sections 7 and 8.
06.02. environmental precautions.	Do not discharge into the drains/surface

	waters/groundwater.
06.03. methods for cleaning up/taking up.	Pick up mechanically., Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust)., Dispose of as prescribed.
06.04. Additional informations (chapter 6).	-

## 07. Handling and storage

07.01. Handling	
07.01.01. Hints on safe handling.	Observe the usual precautions for handling chemicals., Open and handle container with care., Provide good ventilation of working area (local exhaust ventilation if necessary).
07.01.02. Hints for protection against fire and explosion.	Keep away from sources of ignition - refrain from smoking., Take precautionary measures against electrostatic loading.

07.02. Storage	
07.02.01. Requirements for storage rooms and vessels.	Store product in closed containers.,
07.02.02. Hints on storage assembly.	-
07.02.03. Further information on storage conditions.	Keep container tightly closed, cool and dry., Protect from light., Protect from heat and direct sunlight.
07.02.04. Storage category	-
07.02.05. Storage stability	-
07.02.06. Recommended storage temperature	Max. + 25 °C

## 08. Exposure controls/personal protection

08.01. Additional hints on technical system design.	-
08.02. Ingredients with occupational exposure limits to be monitored	CAS no.: 80-62-6 Methylmethacrylat, MAK 210,0 mg/m <sup>3</sup>

08.03. Personal protective equipment <input type="checkbox"/> Personal protective equipment <input type="checkbox"/> Persönliche Schutzausrüstung	
08.03.01. Respiratory protection	If ventilation insufficient, use a respiratory protection apparatus., Breathing apparatus in the event of high concentrations., Short term: filter apparatus, filter AX
08.03.02. Hand protection	Gloves (solvent-resistant), Butyl rubber gloves
08.03.03. Eye protection	safety glasses
08.03.04. Skin protection	light protective clothing
08.03.05. General protective and hygiene measures	Avoid contact with eyes and skin., Do not inhale gases/vapours/aerosols., Do not eat, drink or smoke during work time., Wash hands before breaks and after work., Remove soiled or soaked clothing immediately.

## 09. Physical and chemical properties

09.01. Appearance.	
09.01.01. Form	Liquid
09.01.02. Colour	colourless
09.01.03. Odour	characteristic

09.02. Safety data	
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### Changes in physical state

Boiling point, Boiling range	101	°C	1013 hPa
Flash point	10	°C	
Ignition temperature	430	°C	
self ignition			
explosion limits	2,1	Vol. %	
Upper explosion limit	12,5	Vol. %	

## Vapour pressure

	47	hPa	20 °C
Density			
	0,94	g/cm <sup>3</sup>	
Solubility in water			
miscible	1,6	g/l	
Soluble in			
	n.a.	g/l	
pH-Value			
	n.a.		
Viscosity			
	n.a.	mm <sup>2</sup> /s	

## 09.03. Other information ( chapter 9.)

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**10. Stability and reactivity**

10.01. Hazardous reactions	Reactions with various metals., Reactions with oxidising agents.
10.02. Hazardous decomposition products	No hazardous reactions when stored and handled according to prescribed instructions.
10.03. Thermal decomposition	-
10.04. Additional informations (chapter 10)	-

**11. Toxicological information**

11.01. Acute toxicity	
11.01.01. Acute oral toxicity	Methylmethacrylat LD-50 oral > 5000 mg/kg rat (Lit.)
11.01.02. Acute dermal toxicity	-
11.01.03. Acute inhalational toxicity	Methylmethacrylat LD-50 inh. 7093 ppm/4h rat (Lit.)
11.02. Irritant/corrosive effects	
11.02.01. Irritant effect on skin	Irritating effects on the skin and mucous membrane.
11.02.02. Irritant effect on eyes	slightly irritant
11.03. Sensitization	Possibility of sensitization through skin contact.
11.04. Effects after repeated or prolonged exposition (subacute, subchronic, cronic)	-
11.08. Other information (chapter 11.)	-
11.09. Experiences made in practice.	-
11.10. General remarks.	-

**12. Ecological information**

12.01. Data on elimination ( persistence and degradability) :	
12.01.01. Physico-chemical eliminability	-
12.01.02. Biodegradability	Methylmethacrylat 30,7 % (28 d, OECD 301 C) not readily degradable
12.02. Behaviour in environment compartments.	-
12.03. Ecotoxic effect	-
12.03.01. Fish toxicity	(MMA) LC-50 > 79 mg/l OECD 203 NOEC: 40 mg/l ISO 7346 Oncorhynchus mykiss
12.03.02. Daphnia toxicity	-
12.03.03. Algae toxicity	-
12.03.04. Bacteria toxicity	(MMA) ECO: 100 mg/l Pseudomonas putida
12.04. Further ecological information	Do not allow to enter soil, waterways or waste water canal.

**13. Disposal considerations**

13.01. Disposal considerations	
13.01.01. Disposal / product	This material and its container must be disposed of as hazardous waste.
13.01.02. Disposal / contaminated packagings.	Not cleanable packagings should be disposed of in agreement with the Regional Waste Disposal Authority.
13.02. Waste code no. / name of waste (for Germany only)	07 1 04 The stated Waste Code Number(s) according to the European Waste Catalogue (EAK) is (are) considered as a recommendation. A definite setting (establishment) should be carried out in co-ordination with the Regional Waste Disposal Authority.

**14. Transport information**

14.01. Land transport ADR/RID	
14.01.01. Class	3 (F1)
14.01.02. Number/letter	-
14.01.03. Hazard number (Kemler-number)	339
14.01.04. UN number	1247
14.01.05. Technical name	Combustible liquid METHYLMETHACRYLAT, MOMOMER, stab.
14.01.06. Remarks	VG:II ;LQ4
14.02. Inland waterways transport ADN/ADNR	
14.02.01. Class	-
14.02.02. Number/letter	-
14.02.03. Category	-
14.02.04. Technical name	Combustible liquid METHYLMETHACRYLAT, MOMOMER, stab
14.02.05. Remarks	VG:II
14.03. Marine transport IMDG/GGVSee	
14.03.01. Class	3
14.03.02. UN number	1247
14.03.03. page	3
14.03.04. EmS	F-E,S-D
14.03.05. MFAG	-
14.03.06. MARINE POLLUTANT	Nein
14.03.07. Correct technical name	Combustible liquid METHYLMETHACRYLAT, MOMOMER, stab
14.03.08. Remarks	VG:II
14.04. Air transport ICAO/IATA	
14.04.01. Class	3
14.04.02. UN number	1247
14.04.03. page	3
14.04.04. Correct technical name	Combustible liquid METHYLMETHACRYLAT, MOMOMER, stab
14.04.05. Remarks	VG:II
14.05. Other information (chapter 14.)	-

**15. Regulatory information**

15.01. Labelling in accordance with GefStoffV/EC	
The product is classified and labelled in accordance with EC Directives.	
15.01.02. Hazard symbols	Xn Irritant
	F Highly flammable
TA-Luft / components	METHYLMETHACRYLAT

R phrases	R 11	Flammable
	R 37/38	Irritating to respiratory system and skin.
	R 43	May cause sensitization by skin contact.

S phrases	S 9	Keep container in a well-ventilated place.
	S 16	Keep away from sources of ignition --- No smoking.
	S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
	S 24	Avoid contact with skin.
	S 37	Wear suitable gloves.
	S 60	This material and its container must be disposed of as hazardous waste.

15.02. Other regulations	
15.02.01. Restriction of occupation.	§ 15a GefStoffV § 22 ArbSchG §§ 4,5 MuSchRiV
15.02.02. Decree for case of interference / remarks (for Germany only).	-
15.02.03. Classification according to VbF / remarks (for Germany only).	A II
15.02.04. TA-Luft (Ger.)	II 75 – 100 %
15.02.05. Water Hazard Class (Ger.)	1
15.02.06. Other regulations, restrictions and prohibition regulations (for Germany only)	-

## 16. Other information (chapter 16.).

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(n.a. = Not applicable; n.b.= not determined)

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.