

SAFETY DATA SHEET

[in accordance with the regulation no. 1907/2006/EG (REACH)]

Revision: 24.02.2018

Version: 3/ENG

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Trade name: **PLASTIFLOOR® 510**

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

Relevant identified uses: coating.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Supplier: **Plasti-Chemie Produktionsgesellschaft mbH**

Address: Falgardring 1
D-08223 Falkenstein
Germany

Telephone/Fax number: +49 3745/74432-0 / +49 3745/74432-27

E-mail address for a competent person responsible of sds: volkmar.lull@plasti-chemie.de

Further information provided by: Mr. Volkmar Lull, +49 3745/74432-0

1.4 Emergency telephone number

Chemtrec: 1-800-424-9300 for US

+1 703-527-3887 outside US

Europa 112

Österreich +43 1 406 43 43

Belgien Poison center (BE): +32 70 245 245

Dänemark Poison Control Hotline (DK): +45 82 12 12 12

Finnland Poison Information Centre (FI): +358 9 471 977

Frankreich ORFILA (FR): + 01 45 42 59 59

Deutschland Giftnotruf Berlin, Tel. 030 30686 790

Poison Center Nord: +49 551 19240 (24h erreichbar, Deutsch und Englisch)

Poison Information Centre Erfurt: +49 361 730730 (Gemeinsames Giftinformationszentrum der Länder Mecklenburg-

Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen c/o HELIOS Klinikum Erfurt Nordhäuser Straße 74, 99089 Erfurt)

Irland National Poisons Information Centre (IE): +353 1 8379964

Island +354 543 2222

Italien Poison Center, Milan (IT): +39 02 6610 1029

Luxemburg 112

Niederlande National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)

Norwegen Poisons Information (NO): + 47 22 591300

Portugal Poison Information Center (PT): +351 21 330 3284

Spanien Poison Information Service (ES): +34 91 562 04 20

Schweden Poisons Information Center (SV): +46 8 33 12 31

Schweiz Poison Center: Tel 145; +41 44 251 51 51

Großbritannien NHS Direct (UK): +44 (0) 845 46 47; 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to regulation (EG) 1272/2008/WE

Flam. Liq. 2 H225, Skin Irrit. 2 H315, Skin Sens. 1 H317, Eye Irrit. 2 H319, STOT SE 3 H335

Highly flammable liquid and vapour. Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation.

May cause respiratory irritation.

2.2 Label elements

This substance is graded and classified according to (EG) Nr. 1272/2008 [CLP].

Hazard symbols and signal words

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DANGER

Product identifier

Contains: methyl methacrylate, 2-ethylhexyl acrylate

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precaution statements

P210 Keep away from heat/sparks/open fire/hot surfaces and other ignition source. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IN CONTACT WITH THE SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove person to fresh air and keep at rest in position comfortable for breathing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing.

2.3 Other hazards

The components of this mixture do not meet the criteria for PBT or vPvB in accordance of Annex XIII of REACH.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable.

3.2 Mixture

Chemical characterization: Mixtures, methyl methacrylate resin.

CAS: 80-62-6 EINECS: 201-297-1 Index number: 607-035-00-6 REACH-number.: 01-2119452498-28	<u>Methyl methacrylate</u> Classification acc. to 1272/2008/WE: Flam. Liq. 2 H225, Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H335	25 - 50 %
CAS: 103-11-7 EINECS: 203-080-7 Index number: 607-107-00-7 REACH-number.: 01-2119453158-37	<u>2-Ethylhexyl acrylate</u> Classification acc. to 1272/2008/WE: Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H335	10 - 25 %
CAS: 105-76-0 EINECS: 203-328-4 Index number: - REACH-number.: 01-2119523581-45	<u>Dibutyl Maleate</u> Classification acc. to 1272/2008/WE: Skin Sens. 1 H317, STOT RE 2 H373	0 - 5 %
CAS: 3077-12-1 EINECS: 221-359-1 Index number: -	<u>N,N-Di-(2-hydroxyethyl)-p-toluidine</u> Classification acc. to 1272/2008/WE: Acute Tox. 4 H302, Eye Dam 1 H318	< 2,5 %

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REACH-number.: -		
CAS: 64742-82-1 EINECS: 265-185-4 Index number: 649-330-00-2 REACH-number: -	<u>Naphtha (petroleum), hydrodesulfurized heavy</u> Classification acc. to 1272/2008/WE: Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411	< 1 %

Additional information: For the wording of the hazard statements refer to section 16.

ABSCHNITT 4: FIRST AID MEASUREMENTS

4.1 Description of first aid measurements

General information:	Care of personal protection of the first aider.
Inhalation:	Move victim to fresh air and keep calm. Consult doctor if symptoms persist.
Skin contact:	Wash immediately with soap and water and rinse thoroughly. Directly remove contaminated clothing. Consult doctor if symptoms persist.
Eye contact:	Wash the eye with the eyelid open for several minutes under running water. Consult doctor if symptoms persist.
Ingestion:	Do not induce vomiting. Rinse mouth with water. Consult doctor if symptoms persist. Show the container or label.

4.2 Most important symptoms and effects, both acute and delayed

Prolonged or repeated skin contact may cause irritation, reddening, dry skin, allergic skin irritation, itching, rash. After eye contact reddening, watery eyes, burning eyes, irritation may occur. Swallowing may cause stomach pain, nausea, vomiting. High vapour concentration may cause headache, dizziness and respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment

No further information relevant.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguish media

Suitable extinguish media: CO₂; extinguishing powder, sand. Do not use water.

Unsuitable extinguish media: Water jet – risk of propagation of the flame.

5.2 Special hazards arising from the substance or mixture

Under certain fire conditions traces of other toxic substances are possible. Cracked Hydrocarbons, carbon monoxide and carbon dioxide.

5.3 Advise for firefighters

Highly flammable liquid and vapour. Heat can cause polymerization. Airtight sealed containers may rupture explosively if heated.

Special protective equipment: Self-contained breathing apparatus, chemical-resistant protective clothing.

Additional information: Brand residues and contaminated firefighting water must be disposed according to the official regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition.

Do not breathe vapours. Ensure adequate ventilation.

Use personal protective measures. Keep unprotected persons away.

Avoid skin and eye contamination.

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6.2 Environmental precautions Do not allow product to reach sewage system, water bodies or ground/soil. In case of release of large amounts of product, it is necessary to take appropriate step to prevent it from spreading into the environment. Notify relevant emergency services.
6.3 Methods and material for containment and cleaning up Collect with non-flammable liquid absorbing material (e.g. sand, silica). Do not flush with water or aqueous cleaning agents. Collect in lockable and labelled containers. Treat the collected material as waste. Clean the contaminated place and ventilate it.
6.4 Reference to other sections <u>Disposal:</u> Section 13. <u>Personal protective equipment:</u> Section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling Follow general OSH regulations for dangerous chemical substances. Avoid contact with skin and eyes. Do not breathe vapours. Wash hands thoroughly before breaks and at the end of work. Use as intended. Keep container tightly closed. While handling the product do not eat, drink or smoke. No open flame or sparks. Keep the product away from heat and sources of ignition. Take measures to prevent electrostatic charging. Use non-sparking tools. Vapour can combine with air to form an explosive mixture. Avoid open flame, sparks, direct sunlight and other sources of ignition. Ensure good interior ventilation, especially at floor level (vapours are heavier than air and may pose a risk of explosion).
7.2 Conditions for safe storage, including any incompatibilities <u>General information:</u> Observe country-specific requirements for the storage of hazardous substances. <u>Requirements for storage rooms and containers:</u> Store in labelled and closed original container. Safely prevent any seepage into the ground. Store in well ventilated rooms. Store only outside or in explosion-proof rooms. <u>Storage compatibility:</u> Store away from oxidizing agents (organic peroxides). Keep away from foodstuffs, beverages and food. <u>Additional information:</u> Keep container tightly closed. Protect from heat and direct sunlight. Storage in a collecting chamber. <u>Recommended Storage temperature:</u> +5°C up to + 25°C <u>Storage class:</u> 3
7.3 Specific end use(s) No information about other uses than those mentioned in subsection 1.2.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters <u>Components with community workplace exposure limits:</u> Methyl methacrylate, CAS 80-62-06 Limit value - Eight hours 50 ppm Limit value - Short term 100 ppm DNEL <u>80-62-06 Methyl methacrylate:</u>																
<table border="1"><thead><tr><th>DNEL</th><th>Oral</th><th>Inhalation</th><th>Dermal</th></tr></thead><tbody><tr><td>Worker, long-term, local effects</td><td>1</td><td>210 mg/m³</td><td>1,5 mg/cm²</td></tr><tr><td>Worker, long-term, systemic effects</td><td>1</td><td>210 mg/m³</td><td>13,67 mg/kg KG/day</td></tr><tr><td>Worker, short-term, local effects</td><td>1</td><td>2</td><td>1,5 mg/cm²</td></tr></tbody></table>	DNEL	Oral	Inhalation	Dermal	Worker, long-term, local effects	1	210 mg/m ³	1,5 mg/cm ²	Worker, long-term, systemic effects	1	210 mg/m ³	13,67 mg/kg KG/day	Worker, short-term, local effects	1	2	1,5 mg/cm ²
DNEL	Oral	Inhalation	Dermal													
Worker, long-term, local effects	1	210 mg/m ³	1,5 mg/cm ²													
Worker, long-term, systemic effects	1	210 mg/m ³	13,67 mg/kg KG/day													
Worker, short-term, local effects	1	2	1,5 mg/cm ²													

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Worker, short-term, systemic effects	1	2	-
Consumers, long-term, local effects	1	105 mg/m ³	1,5 mg/cm ²
Consumers, long-term, systemic effects	1	74,3 mg/m ³	8,2 mg/kg KG/day
Consumers, short-term, local effects	1	2	1,5 mg/cm ²
Consumers, short-term, systemic effects	1	2	-

1) low oral toxicity: DNEL not calculated.

2) Long-term DNEL .

PNEC

80-62-06 Methyl methacrylate:

PNEC freshwater	0,94 mg/L
PNEC seawater	0,094 mg/L
PNEC sediment	5,74 mg/kg Dry weight
PNEC soil	1,47 mg/kg Dry weight

8.2 Exposure controls

General safety and hygiene measures:

- Observe the usual precautions for handling chemicals.
- Keep away from foodstuff, beverages and food.
- Directly remove contaminated clothing.
- Wash hand thoroughly before breaks and at the end of work.
- Separate storage of protective clothing.
- Avoid contact with skin and eyes.
- Do not eat/drink/smoke/snuff during work.

Respiratory protection:

- Not required with adequate ventilation.
- At inadequate ventilation use respiratory protection.



Combination filter A-P2 (organic Vapours-Particles)

Hand protection:

- Only use chemical protective gloves with CE labelling of Category III according to EN 374.



Selection of the glove material on consideration of the permeation times, rates of diffusion and the degradation.

Glove material:

The selection of an adequate glove not only depends on the material, but also from different other quality characteristics and varies from manufacturer to manufacturer.

- Butyl rubber
- Nitrile rubber

Penetration time of glove material:

The exact break through time is to be learned from the manufacturer and must be maintained. The break through time is dependent of the activity and usage time

Eye protection:



Tightly sealed goggles

Body protection:

Protective clothing.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<u>Appearance:</u>	
<i>Physical state:</i>	Liquid
<i>Colour:</i>	Blue
<i>Odour:</i>	Characteristic
<i>Odour threshold:</i>	Not determined.

Safety relevant basic data:

Parameters		Unit	Remark
<i>Density:</i>	1	g/cm ³	
<i>Bulk density:</i>			not determined
<i>pH value:</i>			not determined
<i>Melting point/Melting range:</i>			not determined
<i>Boiling point/Boiling range:</i>	100	°C	
<i>Flash point:</i>	10	°C	MMA (DIN 51755)
<i>Inflammability (solid/gaseous)</i>			not applicable
<i>Explosion dangerousness:</i>			not explosive ¹
<i>lower Explosion limit:</i>	0,8	Vol.-%	
<i>upper Explosion limit:</i>	12,5	Vol.-%	
<i>Ignition temperature:</i>	430	°C	
<i>Decomposition temperature:</i>			not determined
<i>Oxidising potential:</i>			not determined
<i>Vapour pressure:</i>	47	hPa	at 20 °C
<i>Rate of vaporization:</i>			not determined
<i>Water solubility:</i>	16	g/L	hardly soluble
<i>Liposolubility:</i>			not determined
<i>Soluble in:</i>			organic solvents
<i>Distribution coefficient:</i>			not determined
<i>n-Octanol/Water:</i>			not determined
<i>Viscosity:</i>	160-200	mPas	Brookfield
<i>Solvent separation test:</i>			not determined
<i>Solvent content:</i>			not determined

¹ The formation of explosive vapour/air mixtures is possible.

9.2 Other information

VOC: 0,01%

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

High temperature may trigger polymerization.

10.2 Chemical stability

The product is stable at intended storage and handling conditions.

10.3 Possible hazardous reactions

Violent reactions with strong alkalis and oxidising agents. Reacts with amines.

10.4 Conditions to avoid

Avoid direct sunlight, heat sources, sources of ignition, high temperatures.

10.5 Incompatible materials

Strong oxidising agents. Acids

10.6 Hazardous decomposition products

In the event of fire: toxic and inflammable gases/vapours.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity:

Relevant LD/LC50 Values:

Oral 80-62-6 Methyl methacrylate: LD50 (Rat) > 5000 mg/kg
38668-48-3 N,N-Di-(2-hydroxyethyl)-p-toluidine: LD50 (Rat) > 100 mg/kg

Dermal 80-62-6 Methyl methacrylate: LD50 (Rabbit) > 5000 mg/kg

Inhalation 80-62-6 Methyl methacrylate: LC50 (Rat) > 29,8 mg/L / 4 h

Irritation to the skin: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Sensitization: May cause allergic reactions.

Risk of aspiration toxicity: Based on available data the classification criteria are not met.

CMR effects:

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

Germ cell mutagenicity Based on available data the classification criteria are not met.

Reproductive toxicity Based on available data the classification criteria are not met.

Other information:

STOT – Single exposure May cause respiratory irritation.

STOT – Repeated exposure Based on available data the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic Toxicity:

80-62-06 Methyl methacrylate EC 50 (daphnia magna): 69 mg/L / 48 h (OECD 202)
NOEC (daphnia magna): 37mg/L (OECD 202 Part 2, 21d)
EC 50 (salineastrum capricornutum): > 110 mg/L / 72 h (OECD 201)
EC 3 (pseudomonas putida): 100mg/L / 16 h
LC 50 (oncorhynchus mykiss): > 79 mg/L / 96 h
NOEC (danio rerio): >9,4 mg/L (OECD 210)
BSB5: 0,14 g O₂/g

38668-48-3 N,N-Di-(2-hydroxyethyl)-p-toluidine:
EC 50 (daphnia magna): 28,8 mg/L
LC 50 (danio rerio): 17 mg/L
BSB5 11 mg O₂/g:
CSB: 2360 mg O₂/g

12.2 Persistence and degradability

Main component of the mixture: Methyl methacrylate is easily biodegradable.

12.3 Bioaccumulative potential

Low bioaccumulative potential.

12.4 Mobility in Soil

The product is mobile in soils.

12.5 Results of PBT and vPvB assessment

The PBT/vPvB criteria of REACH are not applicable for this substance.

12.6 Other adverse effects

Water hazard class 2 (self-classification): hazardous for water.

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods for the product:

When disposing observe the current regulatory provisions for disposing chemical waste. Store remainder in original container.

European waste catalogue

08 00 00 WASTE FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS); ADHESIVES; SEALENTS AND PRINTING INKS

08 02 00 Wastes from MFSU of other coatings (including ceramic materials)

08 02 99 Wastes not otherwise specified

Disposal methods for use packing:

Reuse/recycle/liquidate empty containers in accordance with the legislation in force.

Only containers completely empty can be recycled.

SECTION 14: TRANSPORT INFORMATION

14.1 UN-Number

UN 1866

14.2 UN proper shipping name

ADR 1866 Resin Solution

IMDG, IATA Resin Solution

14.3 Transport hazard class(es)

ADR



Class: 3 (F1) flammable liquids

IMDG, IATA



Class: 3 flammable liquids

14.4 Packing group

II

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

Kemler-number: 33

EMS-number: F-E,S-E

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Transport/Additional information:

ADR:

Limited quantities (LQ): 5 L

Transport category: 2

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Tunnel restriction code:	D/E
RID/GGVCEB	see ADR

SECTION 15: REGULATORY INFORMATION

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

National regulations

This product has to be labelled in accordance with the Ordinance on Hazardous Substances in the latest version.

Employment restrictions

Observe employment restrictions for young people.

Observe employment restrictions for expectant and nursing mothers.

Water hazard class:

WGK 2 (self-classification): hazardous for water.

Other regulations, limitations and prohibitive regulations

Note:

Apply the appropriate local regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not required for this product.

SECTION 16: OTHER INFORMATION

Additional details:

Classification was made based on the data on the content of hazardous substances using the calculation method based on the guidelines of regulation 1272/2008/EC (CLP).

Relevant Phrases:

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed or enters airways.
- H315 Causes skin irritation.
- H317 May cause allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.