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

1.1. Product identifier

PLASTIFLOOR® 540

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

Coatings.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Plasti Chemie Produktionsgesellschaft mbH
Street:	Falgardring 1
Place:	D-08223 Falkenstein
Telephone:	+49(0)3745/74432-0 / +49(0)3745/74432-27
e-mail:	volkmar.lull@plasti-chemie.de
Contact person: Internet:	Mr.Volkmar Lull, +493745/74432-14

1.4. Emergency telephone number:

+49 (0)3745/74432-0
volkmar.lull@plasti-chemie.de Hr. Volkmar Lull
www.plasti-chemie.de volkmar.lull@plasti-chemie.de

Chemtrec: 1-800-424-9300 for US
+1 703-527-3887 outside US
NHS Direct (UK): +44 (0) 845 46 47; 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

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 GB

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

Signal word: Danger

Pictograms:

Product identifier: Methyl methacrylate, 2-ethylhexyl acrylate

Hazard statements

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

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

	smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air 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 substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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	Methyl methacrylate Classification acc. to 1272/2008/WE: Flam. Liq. 2 H225, Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H335	50-100 %
CAS: 103-11-7 EINECS: 203-080-7 Index number: 607-107-00-7 REACH-number.: 01-2119453158-37	2-Ethylhexyl acrylate Classification acc. to 1272/2008/WE: Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H335	2,5-10 %
CAS: 3077-12-1 EINECS: 221-359-1 Index number: - REACH-number.: -	N,N-Di-(2-hydroxyethyl)-p-toluidine Classification acc. to 1272/2008/WE: Acute Tox. 4 H302, Eye Dam 1 H318	< 2,5 %
CAS: 108-32-7 EINECS: 203-572-1 Index number: - REACH-number: -	Propylene carbonate Classification acc. to 1272/2008/WE: Skin Irrit. 2 H315, Eye Irrit. 2 H319	< 1 %

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or

when symptoms persist, seek medical advice.

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 needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO_2). Dry extinguishing powder. alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

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. Advice 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.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Danger of explosion! Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Disposal Section 13. Personal protective equipment 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 an 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 then air and may pose a risk of explosion).

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Do not breathe gas/vapour/aerosol.Avoid contact with skin, eyes and clothes.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feedingstuffs.
Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight. Ensure adequate ventilation of the storage area. Make sure spills can be contained (e.g. sump pallets or kerbed areas). 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.

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances. Store away from oxidizing agents (organic peroxides). Keep away from foodstuffs, beverages and food.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Protect against: UV-radiation/sunlight. heat. Humidity frost.
storage temperature: 5-25°C
Storage class: 3

7.3. Specific end use(s)

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters Exposure limits (EH40)

Components with community workplace exposure limits:
Methyl methacrylate, CAS 80-62-06
Limit value - Eight hours 50 ppm
Limit value - Short term 100 ppm

DNEL/DMEL values

80-62-06 Methyl methacrylate:

DNEL	Oral	Inhalation	Dermal
Worker, long-term, local effects	[1]	210 mg/m³	1,5 mg/cm²
Worker, long-term, systemic effects	[1]	210 mg/m³	13,67 mg/kg KG/day
Worker, short-term, local effects	[1]	[2]	1,5 mg/cm²
Worker, short-term, systemic effects	[1]	[2]	-

Consumers, long-term, local effects	1	105 mg/m³	1,5 mg/cm²
Consumers, long-term, systemic effects	1	74,3 mg/m³	8,2 mg/kg KG/day
Consumers, short-term, local effects	1	2	1,5 mg/cm²
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

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.
Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (BS/EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material: Butyl rubber.
Thickness of glove material: 0,5 mm
Breakthrough time >= 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated)
In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.
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.
The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Skin protection

Wear fire/flame resistant/retardant clothing.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
Generation/formation of aerosols
Exceeding exposure limit values
Insufficient ventilation
Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A/P1-3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:	Colour:
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined.

Safety relevant basic data:

Parameters			Unit	Remark
Density:	1		g/cm³	
Bulk density:				not determined
pH value:				
Melting point/Melting range:				not determined
Boiling point/Boiling range:	100		°C	
Flash point:	10		°C	MMA (DIN51755)
Inflammability (solid/gaseous)				not determined
Explosion dangerousness:				
lower Explosion limit:	0,8	Vol%		(MMA)
upper Explosion limit:	12,5	Vol%		(MMA)
Ignition temperature	430	°C		
Vapour pressure	47	hPa		at20°C (MMA)
Viscosity				not determined

9.2. Other Information

Compressive strength:122,2N/mm² VOC: 0,01%

SECTION 10: Stability and reactivity

10.1. Reactivity

Can polymerise exothermically if heated, exposed to air, sunlight or by addition or free radical initiators.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Keep away from heat. Danger of explosion!
In use may form flammable/explosive vapour-air mixture.
Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Strong acid.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.
Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

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.	

11.2. Information on other hazards Endocrine disrupting properties

No data available.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic Toxicity

Methylmethacrylat	EC 50 (daphnia magna): 69 mg/L / 48 h (OECD 202) NOEC (daphnia magna): 37mg/L (OECD 202 Part 2, 21d) EC 50 (salneastrum capricornutum): > 110 mg/L / 72 h (OECD 201) EC 3 (pseudmonas 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
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. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.5. Mobility in soil

The product is mobile in soils.

12.6. Other adverse effects

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated p
waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNI
PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

List of Wastes Code - used product

080299
WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREC
PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

List of Wastes Code - contaminated packaging

150110
WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND
PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1866

14.2. UN proper shipping name:

ADR Class: 3 (F1) flammable liquids 

IMDG, IATA Class: 3 (F1) flammable liquids 

14.3. Transport hazard class(es):

ADR 1866 Resin Solution

IMDG, IATA Resin Solution

14.4. Packing group II

14.5. Enviromental hazards

Marine pollutant: No

14.6. Special precautions for user

Kemler-number: 33

EMS-Number: F-S, S-E

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

Not applicable

Transport/Additional information:	ADR
Limited quantities (LQ)	5l
Transport category:	2
Tunnel restriction code:	D/E
RID/GGVCEB	see ADR

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC):

2004/42/EC (VOC):

Information according to 2012/18/EU (SEVESO III):

Additional information

not determined

not determined

P5c FLAMMABLE LIQUIDS

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3, 40

National regulatory information

Employment restrictions:

Water hazard class (D):

15.2. Chemical safety assessment

A chemical safety assessment is not required for this product.

SECTION 16: Other information

Changes

Rev. 1.00; Initial release: 25.05.2021

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)
CAS: Chemical Abstracts ServiceCLP: Classification, Labelling and Packaging of substances and mixtures DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European LIst of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

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.)