

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

1.1 Product identifier

PAA-F-Liner

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

1.2.1 Relevant uses

Waterproofing System

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

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98716 Geschwenda / GERMANY
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Address enquiries to

Technical information info@aarsleff-gmbh.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +49 (0)36205 932-0 Mo-Fr 8:00 - 16:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Skin Sens. 1: H317 May cause an allergic skin reaction.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms



Signal word

WARNING

Contains:

Tetramethylene dimethacrylate

Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
5 - 10	Tetramethylene dimethacrylate
	CAS: 2082-81-7, EINECS/ELINCS: 218-218-1, Reg-No.: 01-2119967415-30-XXXX
	GHS/CLP: Skin Sens. 1B: H317
< 1	Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
	CAS: 162881-26-7, EINECS/ELINCS: 423-340-5, EU-INDEX: 015-189-00-5, Reg-No.: 01-2119489401-38-XXXX
	GHS/CLP: Skin Sens. 1A: H317 - Aquatic Chronic 4: H413

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 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 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

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice.

Ingestion

Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Seek medical advice.

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: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment (protective gloves).

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin. Use personal protective equipment.
Use only in well-ventilated areas.
The product is combustible.
Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.
Do not store together with food and animal food/diet.
Do not store together with oxidizing agents.
Keep container tightly closed.
Protect from light.
Protect from exposure to air/oxygen.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Silicon dioxide
CAS: 7631-86-9, EINECS/ELINCS: 231-545-4, Reg-No.: 01-2119379499-16-XXXX
Long-term exposure: 6 mg/m ³ , total inhalable dust

DNEL

Substance
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, CAS: 162881-26-7
Industrial, dermal, Long-term - systemic effects: 3 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 21 mg/m ³ .
general population, oral, Long-term - systemic effects: 1,5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 1,5 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 5,2 mg/m ³ .
Tetramethylene dimethacrylate, CAS: 2082-81-7
Industrial, dermal, Long-term - systemic effects: 4.2 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 14.5 mg/m ³ .
general population, oral, Long-term - systemic effects: 2.5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 2.5 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 4.3 mg/m ³ .

PNEC

Substance
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, CAS: 162881-26-7
soil, 20 mg/kg.
sediment (seawater), 0,712 mg/kg.
sediment (freshwater), 0,712 mg/kg.
sewage treatment plants (STP), 1 mg/l.
seawater, 1 µg/l.
freshwater, 1 µg/l.
Tetramethylene dimethacrylate, CAS: 2082-81-7
soil, 0.573 mg/kg.
sediment (seawater), 0.312 mg/kg.
sediment (freshwater), 3.12 mg/kg.
sewage treatment plants (STP), 2 mg/L.
seawater, 0.004 mg/L.
freshwater, 0.043 mg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	safety glasses (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm; butyl rubber, > 120 min (EN 374)
Skin protection	Long-sleeved work clothes.
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Solid with adherently liquid phase
Color	not determined
Odor	characteristic
Odour threshold	not determined
pH-value	not determined
pH-value [1%]	not determined
Boiling point [°C]	not applicable
Flash point [°C]	not determined
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	not determined
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 [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Polymerization on exposure to light.
Product hardens in contact with air.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, CAS: 162881-26-7
LD50, dermal, Rat: > 2000 mg/kg (OECD 402).
LD50, oral, Rat: > 2000 mg/kg (OECD 401).
Tetramethylene dimethacrylate, CAS: 2082-81-7
LD50, dermal, Rabbit: > 3000 mg/kg.
LD50, oral, Rat: > 5000 mg/kg OECD 401.

Serious eye damage/irritation	Based on the available information, the classification criteria are not fulfilled.
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	May cause an allergic skin reaction. Based on the available information, the classification criteria are fulfilled. Calculation method
Specific target organ toxicity — single exposure	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — repeated exposure	Based on the available information, the classification criteria are not fulfilled.
Mutagenicity	Based on the available information, the classification criteria are not fulfilled.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, CAS: 162881-26-7
LC50, (96h), Brachidanio rerio: > 90 µg/l OECD 203.
EC50, (72h), Desmodesmus subspicatus: >= 260 µg/l OECD 201.
EC50, (48h), Daphnia magna: > 1175 µg/l OECD 202.
Tetramethylene dimethacrylate, CAS: 2082-81-7
LC50, (48h), Leuciscus idus: 32,5 mg/l DIN 38412.
EC10, (16h), Pseudomonas putida: > 1000 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	The product is not biodegradable.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment or into the drainage.

SECTION 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.

Waste no. (recommended)

080409*

Contaminated packaging

Contaminated packing should be disposed of as product waste.

Waste no. (recommended)

150110*

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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 IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

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

14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	not applicable

15.2 Chemical safety assessment

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H413 May cause long lasting harmful effects to aquatic life.
H317 May cause an allergic skin reaction.



16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par 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
 ATE = acute toxicity estimate
 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
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 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

16.3 Other information

Classification procedure

Modified position

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

SECTION 2 been added: Skin Sens. 1

SECTION 6 been added: Take up mechanically.

SECTION 6 been added: Use personal protective equipment (protective gloves).

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.



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