

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 07.12.2015

Version: 1

Revision: 07.12.2015

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

1.1 Product identifier

Trade name **High Performance Acryl (PC) Primer**

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

No further relevant information available.

Application of the substance / the preparation: Adhesion promoter/primer

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SIGNRACER GmbH
Gartenweg 24
CH-6343 Buonas

Phone: +41-41-7920157

Mobil: +41-76-3390158

Informing department:

Product Safety Department
e-mail: ralf.timm@signracer.ch

1.4 Emergency telephone number: +41 41 7920157 (Business hours: 08.00-17.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

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

STOT SE 3 H336 May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02 GHS07

Signal word Danger

Hazard-determining components of labelling:

methyl methacrylate

1-methoxy-2-propanol (monopropylene glycol methyl ether)

pentaerythritol tetraacrylate

Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

Precautionary statements

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

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

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P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of the following components:

Dangerous components:

CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3 Reg.nr.: 01-2119457435-35-XXXX	1-methoxy-2-propanol (monopropylene glycol methyl ether) ----- ☠ Flam. Liq. 3, H226 ☠ STOT SE 3, H336	50-100%
CAS: 80-62-6 EINECS: 201-297-1 Index number: 607-035-00-6 Reg.nr.: 01-2119452498-28-XXXX	methyl methacrylate ----- ☠ Flam. Liq. 2, H225 ☠ Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	10-<25%
CAS: 4986-89-4 EINECS: 225-644-1 Index number: 607-122-00-9	pentaerythritol tetraacrylate ----- ☠ Eye Dam. 1, H318 ☠ Aquatic Chronic 2, H411 ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	≤2.5%

Non-dangerous components

CAS: 2530-85-0 EINECS: 219-785-8 Index number: 607-134-00-4 Reg.nr.: 01-2119513216-50-XXXX	3-trimethoxysilylpropyl methacrylate	≤2.5%
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Regulation (EC) No 648/2004 on detergents / Labelling for contents

aliphatic hydrocarbons	≥ 30%
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Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

Asthma attacks

Headache

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Dazed

Sickness/Nausea

Disziness

Danger At swallowing alternatively vomiting eliminate the danger to penetrate the lungs.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents Water spray, foam, carbon dioxide, dry extinguishing agents

For safety reasons unsuitable extinguishing agents Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

carbon monoxide (CO)

carbon dioxide (CO₂)

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Additional information

Cool endangered containers with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow product to reach sewage system, surface/ground water or soil.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

Dispose of contaminated material as waste according to chapter 13.

Do not flush with water or aqueous cleansing agents

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Product is combustible.

Keep away from combustible materials, open flames and all sources of heat.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store only in the original container.

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Use only containers specifically permitted for this substance/product.
Provide solvent resistant, sealed floor.
Information about storage in one common storage facility: Store away from oxidising agents.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.
Storage class 3
7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see chapter 7.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

107-98-2 1-methoxy-2-propanol (monopropylene glycol methyl ether)

WEL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Sk
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80-62-6 methyl methacrylate

WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm
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DNELs

107-98-2 1-methoxy-2-propanol (monopropylene glycol methyl ether)

DNEL	43.9 mg/m ³ (long-term inhalativ consumer systemic) 369 mg/m ³ (long-term inhalativ worker systemic) 553.5 mg/m ³ (short-term inhalativ worker local)
DNEL	3.3 mg/kg (long-term oral consumer systemic) 18.1 mg/kg (long-term dermal consumer systemic) 50.6 mg/kg (long-term dermal worker systemic)

80-62-6 methyl methacrylate

DNEL	74.3 mg/m ³ (long-term inhalativ consumer systemic) 210 mg/m ³ (long-term inhalativ worker systemic) 210 mg/m ³ (long-term inhalativ worker local) 105 mg/m ³ (long-term inhalativ consumer local)
DNEL	8.2 mg/kg/day (long-term dermal consumer systemic) 13.67 mg/kg/day (long-term dermal worker systemic)
DNEL	1.5 mg/cm ² (long-term dermal consumer local) 1.5 mg/cm ² (long-term dermal worker local) 1.5 mg/cm ² (short-term dermal consumer local) 1.5 mg/cm ² (short-term dermal worker systemic)

PNECs

107-98-2 1-methoxy-2-propanol (monopropylene glycol methyl ether)

PNEC	10 mg/L (freshwater)
PNEC	41.6 mg/kg (sediment - freshwater) 2.47 mg/kg (soil)

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80-62-6 methyl methacrylate

PNEC	0.94 mg/L (freshwater)
	10 mg/L (sewage treatment plant)
	0.094 mg/L (marine water)
PNEC	5.74 mg/kg (sediment - freshwater)
	1.47 mg/kg (soil)

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Protection of hands:

Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

Material of gloves

Butyl rubber
Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The protective gloves to be used must comply with the specifications of EC-Directive 89/686/EG and the related standard EN374, for example KCL 898 Butoject® (full contact), KCL 890 Vitoject® (splash contact).

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed safety glasses (EN 166)

Body protection: Protective work clothing: DIN EN 13034

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Smell:	Alcohol-like

pH-value: Not determined.

Change in condition

Melting point/Melting range: Not determined

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Boiling point/Boiling range:	101 °C
Flash point:	10 °C
Ignition temperature:	270 °C
Self-inflammability:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
Critical values for explosion:	
Lower:	1.7 Vol %
Upper:	12.5 Vol %
Vapour pressure at 20 °C:	47 hPa
Density at 20 °C	0.92-0.94 g/cm ³
Solubility in / Miscibility with	
Water:	Fully miscible
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised

Reacts with strong oxidizing agents

10.4 Conditions to avoid Heat, flames, sparks and other sources of ignition

10.5 Incompatible materials: strong oxidizing agent.

10.6 Hazardous decomposition products: carbon monoxide (CO) and carbon dioxide (CO₂)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	27000 mg/kg (rat)
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107-98-2 1-methoxy-2-propanol (monopropylene glycol methyl ether)

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	7.5 mg/L (rat)

80-62-6 methyl methacrylate

Oral	LD50	7900 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	29.8 mg/L (rat)

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	LD50 ipr	1328 mg/kg (rat)
	LD50 scu	7500 mg/kg (rat)
4986-89-4 pentaerythritol tetraacrylate		
Oral	LD50	540 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Other information (about experimental toxicology):

80-62-6 methyl methacrylate

NOEC	9.4 (35d) mg/L (danio rerio)
	37 (21d) mg/L (daphnia magna)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

107-98-2 1-methoxy-2-propanol (monopropylene glycol methyl ether)

LC50	>100 (96h) mg/L (fishes)
EC50	>100 (48h) mg/L (daphnia magna)

80-62-6 methyl methacrylate

LC50	191 (96h) mg/L (lepomis macrochirus)
	IUCLID
	>79 (96h) mg/L (oncorhynchus mykiss) (OECD 203)
EC5	100 (16h) mg/L (pseudomonas putida)
	IUCLID
EC50	69 (48h) mg/L (daphnia magna)
	IUCLID

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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12.6 Other adverse effects No further relevant information available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Waste material must be disposed of in accordance with Directive on waste 2008/98/EC as well as national and local regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR,RID,ADN, IMDG, IATA

UN1993

14.2 UN proper shipping name

ADR/RID/ADN

1993 FLAMMABLE LIQUID, N.O.S., special provision 640D

IMDG

FLAMMABLE LIQUID, N.O.S.

IATA

Flammable liquid, n.o.s.

14.3 Transport hazard class(es)

ADR,RID,ADN, IMDG, IATA



Class

3 Flammable liquids.

Label

3

14.4 Packing group

ADR,RID,ADN, IMDG, IATA

II

14.5 Environmental hazards:

Marine pollutant:

No

14.6 Special precautions for user

Warning: Flammable liquids.

Kemler Number:

33

EMS Number:

F-E,S-E

Stowage Category

B

14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code

Not applicable.

Transport/Additional information:

ADR/RID/ADN

Limited quantities (LQ)

1L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category

2

Tunnel restriction code

D/E

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IMDG

Limited quantities (LQ)

1L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN 1993 FLAMMABLE LIQUID, N.O.S., SPECIAL PROVISION 640D, 3, II

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t

National regulations

Technical instructions (air):

Class	Share in %
NK	94.5

Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Department issuing data specification sheet: Product safety department

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

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LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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