Printing date 24.05.2013 Version: 3 Revision: 24.05.2013

I Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: Acryl G Fluid

· Article number: 450910-450912-4

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

No further relevant information available.

- · Application of the substance / the preparation self curing resin
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Schütz Dental GmbH, Dieselstrasse 5-6, D-61191 Rosbach v.d.H. (Germany)

Tel.: +49 (0)6003/814-0 Fax: +49 (0)6003/814-900 www.schuetz-dental.de; e-mail: info@schuetz-dental.de

- · Further information obtainable from: F&E, Tel. +49 (0)6003/814-100
- Emergency telephone number: +49 (0)6003/814-0 (8:00-17:00 h)

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

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 H335 May cause respiratory irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R37/38: Irritating to respiratory system and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



F; Highly flammable

R11: Highly flammable.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · 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

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Trade name: Acryl G Fluid

(Contd. of page 1)

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Liquid based on methacryl acid ester, containing an activator.

· Dangerous components:

CAS: 80-62-6 EINECS: 201-297-1 **★** Xi R37/38; **★** Xi R43; **♦** F R11

methyl methacrylate

ŠE 3, H335

🊸 Flam. Liq. 2, H225; 🕩 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT

75-100%

· Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- General information Immediately remove any clothing soiled by the product.
- · After inhalation

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact

Immediately 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. If symptoms persist, consult a doctor.

· After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents

Water haze

(Contd. on page 3)

Trade name: Acryl G Fluid

(Contd. of page 2)

Foam

Fire-extinguishing powder

Carbon dioxide

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- · Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Keep away from ignition sources

Avoid eye and skin contact with the substance.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

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

Send for recovery or disposal in suitable receptacles.

· Reference to other sections

See Section 13 for disposal information.

See Section 8 for information on personal protection equipment.

See Section 7 for information on safe handling

7 Handling and storage

- · Handling
- · Precautions for safe handling

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Close container immediately after use and protect product from light incidence.

Storage between 10 °C and 25 °C.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

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· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

80-62-6 methyl methacrylate

WEL Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device when high concentrations are present.

Filter AX.

- · Protection of hands: Solvent resistant gloves
- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

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

· Eye protection: Safety glasses

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· Information on basic physical and o · General Information	chemical properties
· Appearance:	
Form:	Fluid
Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined
· Change in condition	
Melting point/Melting range:	-48 °C
Boiling point/Boiling range:	101 °C
· Flash point:	10 °C
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	430 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
· Vapour pressure at 20 °C:	47 hPa
· Density:	Not determined

(Contd. on page 5)

Trade name: Acryl G Fluid

(Contd. of page 4)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not determined kinematic: Not determined

· Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Reacts with peroxides and other radical forming substances

Danger of polymerization

Reacts with reducing agents

- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

methyl methacrylate LD-50 oral >5000 mg/kg rat (lit.)

LD-50 inhalativ 7093 ppm/4h rat (lit.)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Slightly irritating.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Type of test Effective concentration Method Assessment

Toxicity to fish: LC-50: >79 mg/l OECD 203 (MMA) NOEC: 40 mg/l ISO 7346

Time: 96 h EEC84

Species:

Oncorhynchus mykiss

Toxicity to Micro- ECO: 100 mg/l starting inhibition

(Contd. on page 6)

(Contd. of page 5)

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

Trade name: Acryl G Fluid

Organisms Species: of cell growth

(MMA) Pseudomonas putida

- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Components:

methyl methacrylate Biodegradability: 30,7 %

Time: 28 d

Method: OECD 301 C Valuation: difficult to decompose

- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

· European waste catalogue

07 01 04* other organic solvents, washing liquids and mother liquors

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Non contaminated packagings may be recycled.

14 Transport information

- · UN-Number
- · ADR, IMDG, IATA UN1247

· UN proper shipping name

· ADR 1247 METHYL METHACRYLATE MONOMER, STABILIZED,

mixture

· IMDG, IATA METHYL METHACRYLATE MONOMER, STABILIZED,

mixture

- · Transport hazard class(es)
- $\cdot ADR$



· Class 3 (F1) Flammable liquids.

(Contd. on page 7)

Trade name: Acryl G Fluid

	(Contd. of page
· Label	3
· IMDG, IATA	
3	
· Class	3 Flammable liquids.
· Label	3
· Packing group · ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	339
EMS Number:	F- E , S - D
· Transport in bulk according to Annex I	II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
$\cdot ADR$	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D/E
· UN ''Model Regulation'':	UN1247, METHYL METHACRYLATE MONOMEI STABILIZED, mixture, 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

· Technical instructions (air):

Class	Share in %
III	2,5-10
NK	75-100

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this 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.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

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Trade name: Acryl G Fluid

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Highly flammable.

R37/38 Irritating to respiratory system and skin.

May cause sensitisation by skin contact. R43

· Department issuing MSDS: F & E

· Contact: Dr. U. Krichbaum

· 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 Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (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 Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* * Data compared to the previous version altered.