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

· 1.1 Product identifier

• Trade name: <u>Futura Basic Cold Fluid</u>

· Article number: 650761, 650762

• 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

• Application of the substance / the mixture self curing resin

 \cdot 1.3 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
- · 1.4 Emergency telephone number:
 - +49 (0) 6003 8140 Schütz Dental (8:00 17:00 Uhr) or
- +49 (0) 6131 19240 Poison Information Center, University Mainz (24 h)

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 H335 May cause respiratory irritation.

· 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



· Signal word Danger

• *Hazard-determining components of labelling: methyl methacrylate*

tetramethylene dimethacrylate

· 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- *P241* Use explosion-proof electrical/ventilating/lighting equipment.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P405 Store locked up.
- P405 Store locked up.
- *P501* Dispose of contents/container in accordance with local/regional/national/international regulations.

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· I ahellin	g of packages where the contents do not exceed 125 ml
	pictograms
	A
بلد	
<u> (()</u>	
GHS02	GHS07
· Signal w	p ord Danger
· Hazard_	determining components of labelling:
	nethacrylate
	hylene dimethacrylate
	statements
	ay cause an allergic skin reaction.
	ionary statements
P261	
P280	Wear protective gloves.
	364 Take off contaminated clothing and wash it before reuse.
	313 If skin irritation or rash occurs: Get medical advice/attention.
P321	Specific treatment (see on this label).
P501	Dispose of contents/container in accordance with local/regional/national/internation
	regulations.
· 2.3 Othe	r hazards
	of PBT and vPvB assessment
	of applicable.
	of annicable

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• Description: Liquid based on methacryl acid ester, containing an activator.

· Dangerous components:						
CAS: 80-62-6	methyl methacrylate	75-100%				
EINECS: 201-297-1	🚸 Flam. Liq. 2, H225; 🔷 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335					
CAS: 2082-81-7	tetramethylene dimethacrylate	2.5-10%				
	Skin Sens. 1B, H317					

• 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

• 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

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

· After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

• After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

• 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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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 haze

Foam

Fire-extinguishing powder

- Carbon dioxide
- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
- 5.3 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.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation Wear protective equipment. Keep unprotected persons away. Keep away from ignition sources
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

- 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 disposal information.

SECTION 7: Handling and storage

- 7.1 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.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: 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.
- 7.3 Specific end use(s) No further relevant information available.

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810	Control parameters
	edients with limit values that require monitoring at the workplace:
	2-6 methyl methacrylate
	• •
WEL	Short-term value: 416 mg/m^3 , 100 ppm
	Long-term value: 208 mg/m ³ , 50 ppm
Addi	tional information: The lists valid during the making were used as basis.
8.2 E	Exposure controls
Pers	onal protective equipment
Gen	eral protective and hygienic measures
Кеер	away from foodstuffs, beverages and feed.
	ediately remove all soiled and contaminated clothing
	h hands before breaks and at the end of work.
	d contact with the eyes and skin.
	iratory protection:
	necessary if room is well-ventilated.
	suitable respiratory protective device when high concentrations are present.
	t term filter device:
Filte	
	ection of hands: Solvent resistant gloves
	erial of gloves
	l rubber, BR
	le rubber, NBR
	etration time of glove material
0,3 n	
	tration time 60 min.
0,11	
	tration time 10 min.
	protection: Safety glasses
	protection:
	ent resistant protective clothing
(Onl	y when handling large quantities)

Appearance:		
Form:	Fluid	
Colour:	Colourless	
Odour:	Ester-like	
Odour threshold:	Not determined.	
pH-value:	Not determined	
Change in condition		
Melting point/freezing point:	undetermined	
Initial boiling point and boiling r	ange: 101 °C	
Flash point:	10 °C	
Flammability (solid, gaseous)	Not applicable.	
Ignition temperature:	430 °C	
		(Contd. on page 5

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	(Contd. of page -
Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	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 at 20 °C:	0.945 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	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
· 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 Reacts with peroxides and other radical forming substances Danger of polymerization Reacts with reducing agents

• 10.4 Conditions to avoid No further relevant information available.

• 10.5 Incompatible materials:

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

· 10.6 Hazardous decomposition products: No dangerous decomposition products known

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 relevant for classification:

methyl methacrylate LD-50 oral >5000 mg/kg rat (lit.) LD-50 inhalativ 7093 ppm/4h rat (lit.)

tetramethylene dimethacrylate LD-50 oral > 5000 mg/kg (rat)

• 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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

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· 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.

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14.1 UN-Number ADR, IMDG, IATA	UN1247	
14.2 UN proper shipping name ADR	1247 METHYL METHACRYLATE MONOME	
IMDG, IATA	STABILIZED mixture METHYL METHACRYLATE MONOMER, STABILIZE mixture	
14.3 Transport hazard class(es)		
ADR		
Class	3 (F1) Flammable liquids.	
Label	3	
IMDG, IATA		
Class	3 Flammable liquids.	
Label	3	
14.4 Packing group ADR, IMDG, IATA	II	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Warning: Flammable liquids. 33	
Danger code (Kemler): EMS Number:	55 F-E,S-D	
Stowage Category	В	
Stowage Code	SW2 Clear of living quarters.	
14.7 Transport in bulk according to Anne Marpol and the IBC Code	ex II of Not applicable.	
Transport/Additional information:		
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml	
Transport category Tunnel restriction code	2 D/E	
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml	

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· UN "Model Regulation":

UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED MIXTURE, 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
- \cdot Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 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

• Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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

SECTION 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.

• Department issuing SDS: 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)

ICAO: International Civil Aviation Organisation

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

• * Data compared to the previous version altered.