

\* **NEOGEL ISO 2000-I-1**

Date revised: 05.03.12

# 6540001/6540001

Version: 5 / GB

Master No. M-401

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## 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier

#### Trade name

NEOGEL ISO 2000-I-1

### Use of the substance/mixture

Purpose of use: Raw substance formulas for manufacturing shaped parts from unsaturated polyester / vinyl ester resins.

### Details of the supplier of the safety data sheet

#### Address

BÜFA Gelcoat Plus

GmbH &amp; Co. KG

Hohe Looge 2-8

26180 Rastede

Telephone no.

+49 4402 975-0

Fax no.

+49 4402 975-400

Information provided

Department product safety / +49 4402 975-415

by / telephone

E-Mail:

produksicherheit-gelcoatplus@buefa.de

### Emergency telephone number

Gifftzentrale Goettingen: +49 551 19240

## 2. Hazards identification \*\*\*

### Classification of the substance or mixture

Classification in accordance with EC directives 1999/45/EC and 67/548/EEC

R10

Xn, R20-R48/20

Xi, R36/37/38

### Label elements

Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC

#### Hazard symbols



Harmful

#### R phrases

10

Flammable.

20

Harmful by inhalation.

36/37/38

Irritating to eyes, respiratory system and skin.

48/20

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

#### S phrases

26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37

Wear suitable gloves.

51

Use only in well-ventilated areas.

60

This material and its container must be disposed of as hazardous waste.

#### Hazardous component(s) to be indicated on label

contains

Styrene

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**Other hazards****Sensitising substances \*\*\***

contains Octabenzone  
May produce an allergic reaction.

**3. Composition/information on ingredients \*\*\*****Hazardous ingredients \*\*\*****Styrene**

CAS No.	100-42-5	EINECS no.	202-851-5
Concentration	>= 25	< 50	%
Xn, R48/20-R20-R65			
Xi, R36/37/38			
R10			

Flam. Liq. 3	H226
Skin Irrit. 2	H315
Acute Tox. 4	H332
Eye Irrit. 2	H319
STOT SE 3	H335
STOT RE 1	H372
Asp. Tox. 1	H304

**Octabenzone**

CAS No.	1843-05-6	EINECS no.	217-421-2
Concentration		< 1	%
Xi, R43			
R52/53			

Skin Sens. 1	H317
Aquatic	H412
Chronic 3	

**Solvent naphtha (petroleum), light arom.**

CAS No.	64742-95-6	EINECS no.	265-199-0
Concentration		< 1	%
Xn, R65			
N, R51/53			
R10			

**4. First aid measures****Description of first aid measures****General information**

Adhere to personal protective measures when giving first aid. Remove soiled or soaked clothing immediately, do not allow to dry.

**After inhalation**

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. In the event of symptoms take medical treatment.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical aid immediately.

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**After ingestion**

Do not induce vomiting. Summon a doctor immediately.

**Most important symptoms and effects, both acute and delayed**

The following symptoms may occur: Headache, Dizziness, Nausea

**5. Firefighting measures****Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam, Dry powder, Carbon dioxide

**Non Suitable extinguishing media**

Full water jet

**Special hazards arising from the substance or mixture**

In case of combustion evolution of dangerous gases possible. In the event of fire the following can be released: Carbon monoxide (CO); Nitrogen oxides (NOx)

**Advice for firefighters**

Use self-contained breathing apparatus.

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Use personal protective clothing. Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol.

**Environmental precautions**

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. Prevent spread over a wide area (e.g. by containment or oil barriers).

**Methods and material for containment and cleaning up**

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). When picked up, treat material as prescribed under heading "Disposal".

**7. Handling and storage****Precautions for safe handling**

Provide good ventilation of working area (local exhaust ventilation if necessary). Observe the usual precautions for handling chemicals.

Keep away from sources of ignition - refrain from smoking. Take precautionary measures against static charges. Vapours can form an explosive mixture with air.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

**8. Exposure controls/personal protection \*\*\*****Control parameters****Exposure limit values \*\*\*****Styrene**

List	EH40			
Type	WEL			
Value	430	mg/m <sup>3</sup>	100	ppm(V)
Short term exposure limit	1080	mg/m <sup>3</sup>	250	ppm(V)
Maximum limit value: Skin resorption / sensibilisation: Pregnancy group: Status: 2005;				

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**Derived No/Minimal Effect Levels (DNEL/DMEL)****Styrene**

Reference substance	Styrene			
DNEL				
Conditions	Worker	Acute	Inhalative	Systemic effects
Concentration	289	mg/m <sup>3</sup>		
DNEL				
Conditions	Worker	Long-term	Inhalative	Systemic effects
Concentration	85	mg/m <sup>3</sup>		
DNEL				
Conditions	Worker	Acute	Inhalative	Local effects
Concentration	306	mg/m <sup>3</sup>		
DNEL				
Conditions	Worker	Long-term	Dermal	Systemic effects
Concentration	406	mg/kg/d		
DNEL				
Conditions	General Population	Acute	Inhalative	Local effects
Concentration	182,7	mg/m <sup>3</sup>		
DNEL				
Conditions	General Population	Acute	Inhalative	Systemic effects
Concentration	174,2	mg/m <sup>3</sup>		
DNEL				
Conditions	General Population	Long-term	Inhalative	Systemic effects
Concentration	10,2	mg/m <sup>3</sup>		
DNEL				
Conditions	General Population	Long-term	Dermal	Systemic effects
Concentration	343	g/m <sup>3</sup>		
DNEL				
Conditions	General Population	Long-term	Oral	Systemic effects
Concentration	2,1			

**Exposure controls****General protective and hygiene measures**

Provide good ventilation of working area (local exhaust ventilation if necessary).

**Respiratory protection**

Short term: filter apparatus, Filter A; Breathing apparatus in the event of high concentrations. If ventilation insufficient, use a respiratory protection apparatus.

**Hand protection**

Chemical resistant gloves			
Appropriate Material	Butyl rubber		
Material thickness	= 07	mm	
Penetrating time	= 30	min	

**Eye protection**

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Tightly fitting safety glasses

**Body protection**

Clothing as usual in the chemical industry.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

<b>Form</b>	liquid		
<b>Colour</b>	transparent		
<b>Odour</b>	of styrene		
<b>Flash point</b>			
Value	34		°C
<b>Efflux time</b>			
Value	> 61		s
method	DIN EN ISO 2431 - 6 mm		
<b>Density</b>			
Value	1		g/cm <sup>3</sup>
Temperature	20	°C	

**10. Stability and reactivity****Conditions to avoid**

Protect from heat and direct sunlight.

**Incompatible materials**

Reactions with peroxides and other radical components.

**11. Toxicological information****Information on toxicological effects****Acute oral toxicity****Styrene**

Species	rat		
LD50	> 5000		mg/kg

**Acute dermal toxicity****Styrene**

Species	rat		
LD50	> 5000		mg/kg

**Acute inhalational toxicity****Styrene**

Species	rat		
LC50	> 10	to	20 mg/l

**Sensitization****Styrene**

valuation non-sensitizing

**Other information**

Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches, nausea, giddiness, vomiting.

**12. Ecological information**

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

**Toxicity****Fish toxicity**

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**Styrene**  
LC/EC/IC50 > 1,0 to 10 mg/l

**Daphnia toxicity**

**Styrene**  
Species Daphnia magna  
LC/EC/IC50 > 1,0 to 10 mg/l

**Algae toxicity**

**Styrene**  
LC/EC/IC50 > 1,0 to 10 mg/l

**Persistence and degradability****Biodegradability**

**Styrene**  
valuation Readily biodegradable (according to OECD criteria)

**13. Disposal considerations****Waste treatment methods****Disposal recommendations for the product**

EWC waste code 07 02 08\* other still bottoms and reaction residues  
The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

**Disposal recommendations for packaging**

Packaging that cannot be cleaned should be disposed off as product waste.

**14. Transport information****Land transport ADR/RID**

UN number 1866  
Technical name RESIN SOLUTION  
Class 3  
Label 3  
Packing group III  
Special provision 640E  
Remarks Viscous product: Transport according to paragraph 2.2.3.1.5 ADR/RID  
Tunnel restriction code D/E

**Marine transport IMDG/GGVSee**

UN number 1866  
Technical name RESIN SOLUTION  
Class 3  
Packing group III  
Remarks Transport according to 2.3.2.5 of the IMDG Code  
EmS F-E, S-E

**15. Regulatory information \*\*\*****Safety, health and environmental regulations/legislation specific for the substance or mixture**

The product is classified and labelled in accordance with EC directives/the relevant national laws.

**Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC****Hazard symbols**

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Harmful

**Hazardous component(s) to be indicated on label**

contains Styrene

**R phrases**

10 Flammable.  
 20 Harmful by inhalation.  
 36/37/38 Irritating to eyes, respiratory system and skin.  
 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**S phrases**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 37 Wear suitable gloves.  
 51 Use only in well-ventilated areas.  
 60 This material and its container must be disposed of as hazardous waste.

**Sensitising substances \*\*\***

contains Octabenzone  
 May produce an allergic reaction.

**VOC**

VOC (EU) 0,25 %

**16. Other information**

Alterations/supplements: Alterations to the previous edition are marked with an asterisk (\*) in the left-hand margin.

**R-phrases listed in chapter 3**

10 Flammable.  
 20 Harmful by inhalation.  
 36/37/38 Irritating to eyes, respiratory system and skin.  
 43 May cause sensitization by skin contact.  
 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 65 Harmful: may cause lung damage if swallowed.

**Hazard statements listed in chapter 3**

H226 Flammable liquid and vapour.  
 H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H372 Causes damage to organs through prolonged or repeated exposure:  
 H412 Harmful to aquatic life with long lasting effects.

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
 This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

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