*** NEOGEL ISO 2000-W-1** Date revised: 05.03.12

6549010/6549010 Version: 5 / GB Master No. M-401 Date of printing: 07.03.12

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

Product identifier

Trade name

NEOGEL ISO 2000-W-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 & Co. KG
Hohe Looge 2-8
26180 Rastede

Telephone no.	+49 4402 975-0
Fax no.	+49 4402 975-400
Information provided by / telephone	Department product safety / +49 4402 975-415
E-Mail:	produktsicherheit-gelcoatplus@buefa.de

Emergency telephone number

Giftzentrale 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

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 Chronic 3	H412

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.

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/m³	100	ppm(V)
Short term exposure limit	1080	mg/m³	250	ppm(V)

Maximum limit value: Skin resorption / sensibilisation: Pregnancy group: Status: 2005;

Titaniumdioxide

List	EH40
Type	WEL
Value	4 mg/m³

Maximum limit value: Skin resorption / sensibilisation: Pregnancy group: Status: 2005;

Derived No/Minimal Effect Levels (DNEL/DMEL)

Styrene

Reference substance Styrene

DNEL				
Conditions	Worker	Acute	Inhalative	Systemic effects
Concentration	289 mg/m³			
DNEL				
Conditions	Worker	Long-term	Inhalative	Systemic effects
Concentration	85 mg/m³			
DNEL				
Conditions	Worker	Acute	Inhalative	Local effects
Concentration	306 mg/m³			
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/m³			
DNEL				
Conditions	General Population	Acute	Inhalative	Systemic effects
Concentration	174,2 mg/m³			
DNEL				
Conditions	General Population	Long-term	Inhalative	Systemic effects
Concentration	10,2 mg/m³			
DNEL				
Conditions	General Population	Long-term	Dermal	Systemic effects
Concentration	343 g/m³			
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

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

Form	liquid			
Colour	Various, depending on coloration			
Odour	of styrene			
Flash point				
Value		34		°C
Efflux time				
Value	>	61		s
method	DIN EN ISO 2431 - 6 mm			
Density				
Value		1,2		g/cm³
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, giddiners, vomiting.

12. Ecological information

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

Toxicity

Fish toxicity

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

Harmful

Hazardous component(s) to be indicated on label

contains Styrene

R phrases

10	Flammable.
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S phrases

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Sensitising substances ***

contains Octabenzone

May produce an allergic reaction.

VOC

VOC (EU)	0,26	%

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.