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## **OBTEGO R-40-(B)**

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

#### 1.1. Product identifier

Trade name/designation:

## **OBTEGO R-40-(B)**

# 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture:

Impregnation agent

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

# Supplier (manufacturer/importer/only representative/downstream user/distributor): OBTEGO AG

Landshuter Straße 36 84051 Altheim Germany

**Telephone:** +49(0)8703/93844-0 **Telefax:** +49(0)8703/93844-29 **Website:** www.obtego.com

**E-mail (competent person):** sdb@obtego.com

## 1.4. Emergency telephone number

24h: +49(0)89-19240

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	

#### 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

#### **Hazard pictograms:**



#### **GHS05** Corrosion

# Signal word: Danger

hazard statements	for health hazards
H318	Causes serious eye damage.

#### Supplemental hazard information: -

Precautionary statements Prevention	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/

Precautionary statements Response		
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER/doctor/	

# 2.3. Other hazards

No data available

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## **OBTEGO R-40-(B)**

# **SECTION 3: Composition / information on ingredients**

#### 3.2. Mixtures

## Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen- tration
CAS No.: 2530-83-8 EC No.: 219-784-2 REACH No.: 01-2119513212-58-XXXX	3-Glycidyloxypropyltrimethoxysilane Eye Dam. 1	10 - < 20 weight-%
CAS No.: 67-56-1 EC No.: 200-659-6	methanol Acute Tox. 3, Flam. Liq. 2, STOT SE 1  ◆ ◆ Danger H225-H301-H311-H331-H370	0 - < 1 weight-%

Full text of H- and EUH-phrases: see section 16.

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### **General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

## Following inhalation:

Immediately call a POISON CENTER/doctor/.... If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious but breathing normally, place in recovery position and seek medical advice. Provide fresh air. In case of respiratory tract irritation, consult a physician.

## In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Immediately call a POISON CENTER/doctor/.... If skin irritation or rash occurs: Get medical advice/attention.

#### After eve contact:

Immediately call a POISON CENTER/doctor/.... In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

## Following ingestion:

Rinse mouth. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Immediately call a POISON CENTER/doctor/.... Get medical advice/attention if you feel unwell.

## Self-protection of the first aider:

Use personal protection equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

## 4.2. Most important symptoms and effects, both acute and delayed

Causes serious eye damage. Serious eye damage/eye irritation

# **4.3.** Indication of any immediate medical attention and special treatment needed Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### Suitable extinguishing media:

The product itself does not burn.

,,, Water spray

## Unsuitable extinguishing media:

Full water jet

# 5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic

#### **Hazardous combustion products:**

In case of fire: Gases/vapours, toxic

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## 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Remove persons to safety.

#### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

#### **Personal precautions:**

Remove persons to safety. Special danger of slipping by leaking/spilling product. Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray.

#### **Protective equipment:**

Wear protective gloves/protective clothing/eye protection/face protection. In case of insufficient ventilation, wear suitable respiratory equipment.

#### 6.1.2. For emergency responders

## **Personal protection equipment:**

Personal protection equipment: see section 8

## 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

## 6.3. Methods and material for containment and cleaning up

#### For containment:

Stop leak if safe to do so. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Dispose of waste according to applicable legislation.

#### For cleaning up:

Water (with cleaning agent)

#### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

#### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

#### **Protective measures**

#### Advices on safe handling:

Wear personal protection equipment (refer to section 8). Provide adequate ventilation.

## Fire prevent measures:

Usual measures for fire prevention.

## Measures to prevent aerosol and dust generation:

Use only in well-ventilated areas.

#### **Environmental precautions:**

Do not allow to enter into surface water or drains.

#### Advices on general occupational hygiene

Wash hands before breaks and after work. Use protective skin cream before handling the product. When using do not eat, drink or smoke. Avoid contact with eyes and skin.

## 7.2. Conditions for safe storage, including any incompatibilities

# Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

## Packaging materials:

Keep/Store only in original container.

## Requirements for storage rooms and vessels:

The floor should be leak tight, jointless and not absorbent.

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## Hints on storage assembly:

Do not store together with: Food and feedingstuffs

**Storage class:** 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

## Further information on storage conditions:

Protect containers against damage. Keep away from heat.

## 7.3. Specific end use(s)

## **Recommendation:**

Observe technical data sheet.

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

# 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	<ol> <li>Long-term occupational exposure limit value</li> <li>short-term occupational exposure limit value</li> <li>Instantaneous value</li> <li>Monitoring and observation processes</li> <li>Remark</li> </ol>
IOELV (EU)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	① 200 ppm (260 mg/m³) ⑤ (may be absorbed through the skin)
TRGS 900 (DE)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	<ul> <li>① 100 ppm (130 mg/m³)</li> <li>② 200 ppm (260 mg/m³)</li> <li>⑤ (kann über die Haut aufgenommen werden)</li> </ul>
TRGS 900 (DE)	Hydrocarbons, TRGS 900	① 0 mg/m³ ⑤ Mass fraction (wt %): 0

#### 8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	① parameter ② Test material ③ Time of sampling ④ Remark
TRGS 903 (DE)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	15 mg/L	<ol> <li>Methanol</li> <li>Urin</li> <li>bei Langzeitexposition, Expositionsende bzw. Schichtende</li> </ol>

#### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type
		2 Exposure route
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	147 mg/m³	DNEL worker     Long-term – inhalation, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	43.5 mg/m <sup>3</sup>	DNEL worker     Long-term – inhalation, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	147 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	43.5 mg/m <sup>3</sup>	① DNEL Consumer ② Acute - inhalation, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	21 mg/kg bw/day	DNEL worker     Long-term - dermal, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	12.5 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	21 mg/kg bw/day	DNEL worker     Acute – dermal, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	12.5 mg/kg bw/day	DNEL Consumer     Acute – dermal, systemic effects
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	12.5 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	1 mg/l	① PNEC aquatic, freshwater
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	0.1 mg/l	① PNEC aquatic, marine water
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	10 mg/l	① PNEC sewage treatment plant
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	0.79 mg/kg	① PNEC sediment, freshwater
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	0.079 mg/kg	① PNEC sediment, marine water
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	0.13 mg/kg	① PNEC soil, freshwater

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

Technical measures to prevent exposure

## 8.2.2. Personal protection equipment

## **Eye/face protection:**

Eye glasses with side protection DIN EN 166

#### Skin protection:

Tested protective gloves must be worn (EN ISO 374). Suitable material: Butyl caoutchouc (butyl rubber), Breakthrough time: > 120 min. Breakthrough times and swelling properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well.

# Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: aerosol or mist formation. Filtering device (full mask or mouthpiece) with filter: A-P2.

## Other protection measures:

Do not breathe vapour/aerosol. Avoid contact with eyes and skin. Wear suitable protective clothing, gloves and eye/face protection.

## 8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

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# **OBTEGO R-40-(B)**

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

**Appearance** 

Physical state: Liquid Colour: not determined

Odour: not determined

Safety relevant basis data

parameter		at °C	Method	Remark
рН	not determined			
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	290 °C			
Decomposition temperature	not determined			
Flash point	107 °C			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	< 1.33 hPa	20 °C		
Vapour density	not determined			
Density	not determined			
Bulk density	not determined			
Water solubility	slightly soluble			
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined	40 °C		

## 9.2. Other information

No data available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

## 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

## 10.3. Possibility of hazardous reactions

Exothermic reaction with: Oxidising agent

#### 10.4. Conditions to avoid

See section 7. No additional measures necessary.

## 10.5. Incompatible materials

Materials to avoid: Oxidising agent

# 10.6. Hazardous decomposition products

No known hazardous decomposition products.

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## **OBTEGO R-40-(B)**

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Substance name	Toxicological information
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	LD <sub>50</sub> oral: 8,025 mg/kg (Rat) LC <sub>50</sub> Acute inhalation toxicity (dust/mist): >5.3 mg/l (Rabbit) LD <sub>50</sub> dermal: 4,250 mg/kg (Rabbit)

#### Acute oral toxicity:

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

## Acute dermal toxicity:

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

#### Acute inhalation toxicity:

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

#### **Skin corrosion/irritation:**

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

#### Serious eye damage/irritation:

Causes serious eye damage.

## Respiratory or skin sensitisation:

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

#### Germ cell mutagenicity:

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

## **Carcinogenicity:**

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

# Reproductive toxicity:

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

#### **STOT-single exposure:**

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

#### **STOT-repeated exposure:**

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

#### **Aspiration hazard:**

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

#### **Additional information:**

The evaluation was carried out according to the calculation method. Toxicological data are not available. No data available

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Substance name	Toxicological information
3-Glycidyloxypropyltrimethoxysilane	EC <sub>50</sub> : 324 mg/l 2 d (Simocephalus vetulus)
CAS No.: 2530-83-8 EC No.: 219-784-2	EC <sub>50</sub> : 119 mg/l 3 d (Algae/water plant, Anabaena flosaquae)
	NOEC: >100 mg/l 21 d (Daphnia magna (Big water flea))

## 12.2. Persistence and degradability

Substance name	Biodegradation	Remark
3-Glycidyloxypropyltrimethoxysilane	Yes, slowly	
CAS No.: 2530-83-8		
EC No.: 219-784-2		
methanol	Yes, rapidly	
CAS No.: 67-56-1		

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Substance name	Biodegradation	Remark
EC No.: 200-659-6		

#### 12.3. Bioaccumulative potential

Substance name	Log K <sub>OW</sub>	Bioconcentration factor (BCF)
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	-2.6	
methanol CAS No.: 67-56-1 EC No.: 200-659-6	-0.77	

#### **Accumulation / Evaluation:**

No indication of bioaccumulation potential.

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
3-Glycidyloxypropyltrimethoxysilane CAS No.: 2530-83-8 EC No.: 219-784-2	_
methanol CAS No.: 67-56-1 EC No.: 200-659-6	_

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Other adverse effects

The evaluation was carried out according to the calculation method. Toxicological data are not available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

## 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

#### Waste code product:

08 02 99 Wastes not otherwise specified

## Waste code packaging:

15 01 10 \* packaging containing residues of or contaminated by dangerous substances

#### **Waste treatment options**

# Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

# Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

No dangerous good in sense of these transport regulations.

Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN-No.			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.

<sup>\*:</sup> Evidence for disposal must be provided.

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## **OBTEGO R-40-(B)**

Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.2. UN proper ship	pping name		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport haza	rd class(es)		
not relevant			
14.4. Packing group			
not relevant			_
14.5. Environmental	hazards		
not relevant			
14.6. Special precau	tions for user		
not relevant			_

# 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code not relevant

# **SECTION 15: Regulatory information**

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

# 15.1.1. EU legislation

## Other regulations (EU):

2008/98/EC , 2001/118/EC, 1999/13/EC, 2004/42/EC, (EC) No. 1907/2006, (EU) 2015/830, 75/324/EEC, 2008/47/EC, (EC) No. 1272/2008, 2008/68/EC, (EC) No. 648/2004

Information on Directive 1999/13 / EC on the limitation of emissions of volatile organic compounds (VOC-RL): VOC (in q / L): < 220

VOC EU Limit (2004/42/EG) (cat. IIA/j): 140 g/L, VOC-value 0

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content. Maximum VOC content (g/L) of the product in a ready to use condition: 11

#### 15.1.2. National regulations

#### [DE] National regulations

#### **Restrictions of occupation**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

# Störfallverordnung

#### Remark:

Not subject to StörfallVO.

# **Technische Anleitung Luft (TA-Luft)**

#### Ziffer 1:

5.2.5 Organische Stoffe

#### Water hazard class

## WGK:

2 - deutlich wassergefährdend

#### **Description:**

Classification according to VwVwS, Annex 4.

# Technische Regeln für Gefahrstoffe

TRGS 200, TRGS 401, TRGS 510, TRGS 900, TRGS 905

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## **OBTEGO R-40-(B)**

## Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)

Berufsgenossenschaftliche Informationen (DGUV-Informationen): BGI 595, BGI 564

## Other regulations, restrictions and prohibition regulations

Gefahrstoffverordnung (GefStoffV), Wasserhaushaltsgesetz (WHG)

#### 15.2. Chemical Safety Assessment

not applicable

## **SECTION 16: Other information**

#### 16.1. Indication of changes

No data available

#### 16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu

# 16.3. Key literature references and sources for data

No data available

# 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	

## 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs. ()

## 16.6. Training advice

No data available

## 16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.