

Material Safety Data Sheet (1907/2006/EG, article 31)

OBTEGO R-400

OBTEGO®
innovative surface protection

Version: 4.0 / ENG Date of issue: 03.09.2005
Page: 1 / 6 Date of last alteration: 12.04.2008

1. PRODUCT AND COMPANY IDENTIFICATION

Commercial product

name : OBTEGO® R-400

Application: Impregnation/sealing for construction materials

Distributor : OBTEGO AG
Niederfeldstrasse 38
D-84088 Neufahrn i. Ndb.
Germany Tel.: +49(0)8773/70723-0, Fax: +49(0)8773/70723-29

Emergency call : Poison emergency number Munich toxicological department of the II. Medical clinic right of the Isar in the Ismaninger St. 22 81675 Munich) Emergency number: +49 (0)89/19240

2. HAZARDS IDENTIFICATION

Classification:



R11 Highly flammable

Further hazards to man and environment:

Longer skin contact and inhalation of aerosol spray should be avoid.
R11 Highly flammable.

3. COPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixture of Alkylsilan/-siloxan

Information on ingredients:

Substance	CAS-No.	EINECS/ELINCS No.	(wt. %)	Classification
Ethyl alcohol	64-17-5	200-578-6	< 70	F, R11
Methyltrimethoxy-silane	1185-55-3	214-685-0	< 10	F, Xn, R11-22
Octyltriethoxy-silane	2943-75-1	220-941-2	< 5	Xi, R38
Methyl alcohol	67-56-1	200-659-6	< 1	T R11-39/23/24/25

4. FIRST-AID MEASURES

After eye contact: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. At continuously irritation visit medical help.

After skin contact: Removing contaminated clothes. Immediately flush skin with plenty of water and soap. At continuously irritation visit medical help.

After inhalation: Bringing to fresh air. If necessary guarantee medical help.

After swallowing: Drink water after swallowing. Vomiting the concerning people only by full consciousness . Medical help is immediately required!

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Medical advice: Restore greasy film of the skin by hand cream, to prevent dermatitis.

5. FIRE-FIGHTING MEASURES

Special dangers: At a fire carbon monoxide can be released. Steams are heavier than air and spread on the ground. Ignition about a larger distance possible.

Suitable extinguishing agent: Carbon dioxide, dry powder or water spraying beam. Fighting a greater fire with water spraying beam or alcohol constant foam.

Unsuitable extinguishing agents: Not using a sharp jet of water.

Protection equipment: Full protective clothing and compressed air breathing apparatus

Other details: Endangered containers with water spraying beam cool.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Carrying protection equipment. Removing igniting sources.

Environmental protective measures: Preventing contamination of water and the ground. Preventing penetration into the sewage system, into rivers or surface waters by setting up Shut-off measures made of sand or earth or by other suitable ones.

Measures after bury: Providing a sufficient ventilation. Taking with liquid definite material (sand, Kieselgur, acid tie, universal tie, sawdust).

7. HANDLING AND STORAGE

Handling: Providing good ventilating/exhaust at work. Extinguish all open flames, remove igniting sources and spark formation. Not smoking. Taking measures against a static charge. Grounding all devices. Keep away from sewage system.

Advice for storage of Incompatible materials: Being stored separated from aerosols, combustible substances, oxidants and corrosive substances. Keeping away from water and atmospheric humidity.

Storage: Containers locked tightly and keep at a well ventilated place. Keep away from warmth of a direct sun irradiation and other warmth or ignite sources. Not smoking in the storage area. Protect from humidity. Storage class 3 (PG II) - inflammable liquid substances.

Recommended materials: Materials for containers or for the inside lining; unalloyed steel, stainless steel or plastic containers with permission for dangerous goods. As touch color for the inside lining of containers suitable: Zinc silicate, epoxy resin.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Technical protection-measures:

Using only in well ventilated areas.

TWA - value:

Methanol 260 mg/m³, 200 ppm

Top limitation transgression factor 4, remark Y, remark H (skin absorptively, see TRGS 900, section 2.6). = (a risk of the fruit damage by observance of the TWA needs not to be not feared).

Ethanol 960 mg/m³, 500 ppm

Top limitation transgression factor 4, remark Y, remark H (skin absorptively, see TRGS 900, section 2.6). = (a risk of the fruit damage by observance of the TWA needs not to be feared).

Breath protection:

If the product is used in large quantities, in closed rooms or under other circumstances, under which one approaches the limit values or these are exceeded, a suitable breath protection should be taken advantage of. A breath protective mask with cartridge filter for organic steams/dust must be worn, if it comes to a formation of aerosol or spraying mist.

Hand protection:

Carry chemical protective gloves: PVA or nitrile rubber (level 6, penetration time* > 480 min). Contact your supplier of protective gloves against chemicals for information about penetration times of the gloves. * can vary) depending on execution and application conditions penetration times!

Eye protection:

Wearing basket glasses.

Body protection:

Chemical constant safety shoes or boots. Standard working clothes.

Hygiene measures:

The usual hygiene measures suffice; wash hands after the use of material; particularly before the meal, drinking and smoking.

Further notes:

These precautions are valid for a handling at room temperature. Use at increased temperature or aerosol-/ spraying applications require possibly further caution measure near men. For a further information which one puts concerning the use of silicones in aerosol consumer goods, please read the guidelines concerning use of material on silicone basis in aerosol consumer goods that the silicone industry has provided. (www.SEHSC.com)

9. PHYSICAL AND CHEMICAL PROPERTIES

State of aggregation:

Liquid

Color:

yellowish

Odour:

alcoholically

Boiling-point/boiling area:

~ 75 °C

Flash point:

13°C

Igniting temperature:

~ 400 °C

Explosion limits:

lower ~ 3,1 Vol%; upper ~ 15 Vol%

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Vapor pressure: not determined

Density: 0,86 g/cm³ at 20°C

Solubility in water: not soluble

Viscosity: not determined

10. STABILITY AND REACTIVITY

Stability: Under normal application conditions stable

Avoiding Conditions: Humidity, warmth, flames and spark.

Substances to be avoided: Can react with strong oxidants and strong acids.

11. TOXICOLOGICAL INFORMATION

Particular relevance

classification LD/LC50-value:

64-17-5 Ethyl alcohol

Oral LD50 7000mg/kg (rat)
Dermal LD50 >20000mg/kg (rabbit)
Inhalativ LC50/4h 95,6 mg/l (rat)

67-56-1 Methyl alcohol

Oral LD50 5628mg/kg (rat)
Dermal LD50 15800mg/kg (rabbit)
Inhalativ LC50 85 ml/l (rat)

After eye contact: Lead to easy irritations.

After skin contact: Can seem charming at longer or repeated contact.

After inhalation: Can cause slight irritation.

Health awareness: No sensitizing effect known

Other details

to the health: Handle the product with the necessary precautions in using chemicals.

12. ECOLOGICAL INFORMATION

Ecotoxicological

effects: Classification based on the contents substances: In high concentrations, harmful to aquatic organisms. No disruptions in sewage treatment plants are to be expected.

Mobility: -

Persistence and degradableness

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Bio reduction/

additional notes: The hydrolysis product (methanol) is biologically easily degradable. Silane content: Biologically not degradable.

Additional notes: By hydrolysis: Methanol and silanol and/or siloxanol connections. Silane content: Elimination by absorption to activated sludge.

Bio accumulation potential

Additional notes: -

Other harmful one

Effect: -

Additional ecological

Notes (general): After our present knowledge no further data are known.

13. DISPOSAL CONSIDERATIONS

Product: Correct elimination by burning in a special waste burning plant. Local official regulations have to be taken into account.

Packing: Emptying containers completely. Not making holes, cutting or welding in containers. Supply container to a refurbishing. Disposal in accordance with the official regulations.

14. TRANSPORT INFORMATION

Transport on street- / iron rail transport (ADR/RID)

UN-number: 1993
Class: 3
Packing group: II
Designation of goods: FLAMMABLE LIQUID, N.O.S.
(Contained Ethanol)
Warning notice: 33 / 1993



Transport by sea (IMDG)

UN-number: 1993
Class: 3
Packing group: II
Designation of goods: FLAMMABLE LIQUID, N.O.S.
(Contained Ethanol)
MFAG: -
EmS: F-E, S-D
Designation: FLAMMABLE LIQUID



Air transport (IATA)

UN-number: 1993
Class: 3
Packing group: II
Designation of goods: FLAMMABLE LIQUID, N.O.S.
(Contained Ethanol)
Designation: FLAMMABLE LIQUID



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15. REGULATORY INFORMATION

Identification in accordance with hazardous materials ordinance and guideline 67/548/EWG

Symbol (s): F Highly flammable

R-phrases: 11 Highly flammable

S-phrases: 16 Keep away from sources of ignition - No smoking.
23 Do not breath vapor/spray.
29 Do not empty into drains.
33 Take precautionary measures against static discharges.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Using only in well-ventilated areas.

National regulations water endangerment class (WGK): 1 (weakly water-polluting)

Business safety ordinance: Combustible liquid (R11); VbF A I
Adhering to technical rules for combustible liquids.

Status

EINECS: All contents substances listed or excepted from the listing.

TSCA: All contents substances listed or excepted from the listing.

16. OTHER INFORMATION

Texts of R-phrases:

R11: Highly flammable
R22: Harmful if swallowed.
R38: Irritating to skin.
R39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

The details are based on today's stand of our knowledge and serve to describe the product with regard to the safety measures to be taken. You don't represent any warranty of product qualities, however, and don't give reasons for any contractual facts of the case.