

**SAFETY DATA SHEET**

Date of issue: 03.07.2006

Date of update : 09.10.2007

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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****1.1. Identification of the preparation:****SOLIDO KLAR E - RESIN SYSTEM FOR STONE SLABS****1.2. Use of the preparation:**

Two-component epoxy resin system (component A) for repairs and hardening stone's elements.

**1.3. Company/undertaking identification:**NOVOL Sp. z o.o.  
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62-052 Komorniki

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**2. HAZARD IDENTIFICATION****HEALTH HAZARDS:**

Irritant product. Irritating to skin and eyes. May cause sensitization by skin contact. Vapours may cause drowsiness and dizziness

**DANGEROUS PROPERTIES:**

Product dangerous for the environment. Toxic to aquatic organism, may cause long-term adverse effects in the aquatic environment.

**OTHER:**

No data available.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

EEC No.	Name of the substance	WE No.	CAS No.	Classification of the substance	Marking of the substance	Composition
603-074-00-8	Epoxy resin (average molecular weightf 700 1200)	500-033-5	25068-38-6	Xi; R36/38 R43 N; R51-53	Xi, N R: 36/38-43-51/53 S: (2-)28-37/39-61	45-95%
	2,3-epoxypropyl neodecanoate	247-979-2	26761-45-5	Xi; R: 36-43 N; 51/53	Xi; R: 36/37/38 S: (2-)26-36	10-25%
	1,6-bis(2,3-epoxypropoxy)hexane	240-260-4	16096-31-4	Xi; R36/38 R43 N; R52/53	Xi; N R: 36/38-43-52/53 S: (2-)24/25-36/37/39	2.3-10%
603-004-00-6	Butan-1-ol	200-751-6	71-36-3	R10 Xn; R22 Xi; R37/38-41 R67	Xn R: 10-22-37/38-41-67 S: (2-)7/9-13-26-37/39-46	1-4%
607-176-00-3	A mixture of: $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propiony l- $\omega$ -hydroxypoly(oxyethylene) and $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propiony l- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propiony loxypoly(oxyethylene)	400-830-7	--	R43 N; 51/53	Xi, N R: 43-51/53 S(-2)36/37-61	1-2.5%

**4. FIRST AID MEASURES****GENERAL INFORMATION:**

See 11 point Product Date Sheet.

**INHALATION:**

Take the casualty into the fresh air and keep warm irregular breathing/no breathing artificial respiration call a physician.

**SKIN:**

Take off soiled clothes. Wash off with plenty of lukewarm water and soap (at least 15 minutes).Consult a doctor in the event of skin reaction.

**EYES:**

Hold the eyes open and rinse immediately with plenty of lukewarm water (at least 15 minutes). Contact with ophthalmologist.

**ALIMENTARY TRACT:**

Do not provoke vomiting (risk of choking). Rinse mouth with water. Medical help is required.

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**5. FIRE-FIGHTING MEASURES**

**FIRE EXTINGUISHING**

**SUBSTANCES:** Powder, foam resistant to alcohols, carbon dioxide, watermist.

**SPECIAL HAZARDS:** Fire may cause the generation of carbon monoxide, nitrogen oxidants and other toxic gases. Prevent to get through to the sewage system, to the surface water, underground water, to the soil.

**PROTECTIVE EQUIPMENT:** Firemen have to wear self-contained breathing apparatus and protective clothing.

**OTHER INFORMATION:** Cool adjacent tanks by spraying water from a safe distance.

**6. ACCIDENTAL RELEASE MEASURES**

**PERSONAL PROTECTION:** Eliminate sources of ignition. Ensure sufficient ventilation in this room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Put on protective equipment see chapter 8.

**PROTECTION OF THE ENVIRONMENT:** Prevent to get through to the sewage system, to the surface water, underground water, to the soil. In case of a major spillage the affected area should be separated with bounds.

**ACTION IN CASE OF SPILLAGE:** Seal the container; damaged containers should be placed in emergency containers. Besprinkle spillage, use e.g. mica, sand, wood flour. Remove the substance mechanically and put to emergency containers. For further disposal measures: see chapter 13.

**7. HANDLING AND STORAGE**

**HANDLING RULES:** Keep away from heat and sources of fire. Do not smoke. Do not inhale vapours. Avoid contact with skin and eyes. Prevent to get through to the sewage system, to the surface water, underground water, to the soil. Use only in well ventilated place. Put on protective equipment-see chapter 8.

**STORAGE:** Keep in sealed containers in cool, well ventilated rooms (temperatures 15° - 20°C),. Storage in the vicinity of a large quantity of organic peroxides or strong oxidants is prohibited.

**PECULIAR APPLICATION:** See the technical product data sheet.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**LIMIT VALUES:** for Butan-1-ol CAS 71-36-3 according to:

- *TRGS 900:* MAK: 20ppm, MAK: 310 mg/m<sup>3</sup>, 1(I),DFG, Y
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA --- mg/m<sup>3</sup> --- mg/m<sup>3</sup>, STEL 50ppm, 154 mg/m<sup>3</sup> Sk

**RESPIRATORY TRACT PROTECTION:** Gas mask with "A" type absorbing canister.

**PROTECTION OF HANDS:** Protective gloves suitable for handling solvents (viton, nitrile rubber, thickness >0.5mm, the time of perforation should give gloves producer because the time of perforation runs on used stuff and others quality marks).

**EYES PROTECTION:** Protective glasses.

**SKIN PROTECTION:** Suitable protective clothing (antistatic, impregnated clothing).

**WORKPLACE:** Topical stays and exhausting ventilation.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state: liquid  
Colour: light yellow  
Smell: pungent, penetrating odour  
Boiling point: >200°C  
Flash-point: >100°C  
Autoignition point: --  
Explosion limits: product is not explosive  
Vapour pressure: --  
Density: approx. 1.2 g/cm<sup>3</sup> (20°C)  
Water solubility: insoluble  
Partition coefficient n-octanol/water: --  
Viscosity (rotating rheometer): approx. 600 mPas

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**10. STABILITY AND REACTIVITY**

**STABILITY:** The product remains stable under normal conditions.

**AVOID THE CONTACT OF THE MATERIAL WITH:** Strong oxidants, high temperature, strong acids and basis.

**DANGEROUS DECOMPOSITION PRODUCTS:** Carbon monoxide, nitric oxides and other toxic gasses are generated as a result of thermal decomposition.

**11. TOXICOLOGICAL INFORMATION**

Toxicological studies at the preparation are not available.

**TOXICITY:** CAS: 25068-38-6 Epoxy resin (average molecular weight < 700):  
LD<sub>50</sub> (rat, skin) 11400 mg/kg  
CAS: 26761-45-5 2,3-epoxypropyl neodecanoate:  
LD<sub>50</sub> (rat, oral) 9600 mg/kg  
LD<sub>50</sub> (rat, skin) 3800 mg/kg  
CAS: 16096-31-4 1,6-bis(2,3-epoxypropoxy)hexane:  
LD<sub>50</sub> (rat, oral) 8500 mg/kg  
LD<sub>50</sub> (rat, skin) >4900 mg/kg

**IRRITATING EFFECT:** Skin: irritating to skin and mucous membranes. May cause sensitization by skin contact  
Eyes: irritating effect.

**SYMPTOMS OF POISONING:** Headache and vertigo, fatigue, decreased muscle power, sleepiness and, in exceptional instances, loss of consciousness. If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting, and diarrhoea.

**12. ECOLOGICAL INFORMATION**

Ecological studies at the preparation are not available.

The product is very poorly soluble in water. Keep away from the sewage system, surface water, underground water, and soil. Toxic to aquatic organism, may cause long-term adverse effects in the aquatic environment.

**13. DISPOSAL CONSIDERATIONS**

**RECOMMENDATION:** Product must be disposed of by special means in accordance with local regulations.

**REMAINS OF PRODUCT:** Remains of product in the tin should be carefully remove and harden using suitable hardener.

**ATTENTION:** Remains should be hardened in small portions far from flammable substances. Much amount of heat is emitting in the time of reaction!

**CLEAN TIN:** The tin is subject to cash deposit as guarantee and should be return to manufacturer.  
**code of waste:** 15 01 10\*

**14. TRANSPORT INFORMATION**

**GENERAL INFORMATION:** Do not transport with materials class 1 (with the exception of materials class 1.4S) and with some of materials class 4.1 and 5.2. Avoid direct contact with materials class 5.1 and 5.2 in the time of transport. Do not use naked flame and do not smoke. Transport temperature 15° - 20°C

**ADR/RID:** UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.( Epoxy resin (average molecular weightf 700 1200), 9, III

UN No.	Name of the raw material	Hazard identification number	Warning label required	Classification Code	Packaging group
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S	90	9	M6	III

**IMDG- Code:** UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Epoxy resin (average molecular weightf 700 1200), CLASS 9, UN 3082, PG III. EmS: F-A, S-F

**ICAO/IATA:** No data available.

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**15. REGULATORY INFORMATION**

Safety data sheet in accordance with Directives:

67/548/EWG(2006/121/WE)

91/155/EWG (2001/58/WE)

1999/45/EC (2006/8/WE)

2006/1907/WE REACH

Other regulations: ADR (2007-2009) , IMDG Code 2006 Edition

**CONTAINS:**

Epoxy constituents.. See information supplied by manufacturer.

**HAZARD SYMBOL(S)**



Xi Irritant  
N Product dangerous for the environment.

**RISK-PHRASES:**

R36/38 Irritating to eyes and skin.  
R43 May cause sensitization by skin contact  
R51/53 Toxic to aquatic organism, may cause long-term adverse effects in the aquatic environment.  
R67 Vapours may cause drowsiness and dizziness

**SAFETY-PHRASES:**

S (2-) Keep out of the reach of children.  
S28 After contact with skin, wash immediately with plenty of water  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S 46 If swallowed, seek medical advice immediately and show this container or label.  
S51 Use only in well-ventilated areas.  
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

**16. OTHER INFORMATION**

Full text of the R-Phrases from section 2:

R22 Harmful if swallowed.

R36/38Irritating to eyes and skin.

R37 Irritating to respiratory system.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact

R51/53 Toxic to aquatic organism, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness

R52/53 Harmful to aquatic organism, may cause long-term adverse effects in the aquatic environment.

Information contained herein is based on our current knowledge. This document does not constitute a warranty for product characteristics.

Issued by: NOVOL Sp. z o.o.

Information: Laboratory Research and Development; tel. +48 61 810 99 09