

SAFETY DATA SHEET

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the preparation: **TIX E+ EPOXY ADHESIVE**

1.2. Use of the preparation: TIX E+ is an epoxy adhesive for joins stone elements.

1.3. Company/undertaking identification: **NOVOL Sp. z o.o.** Tel: (061) 810-98-00
ul. Żabikowska 7/9 Fax: (061) 810-98-09
62-052 Komorniki www.novol.pl
Emergency tel: (061) 810-98-00

2. HAZARD IDENTIFICATION**HEALTH HAZARDS:** Irritant product. Irritating to eyes and skin. May cause sensitization by skin contact.**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	45-90%
--	2,3-epoxypropyl neodecanoate	247-979-2	26761-45-5	Xi; R:38 R43 N; 51/53	Xi; N R: 38-43-51/53 S:(2-)36/37-61	9-22%
---	1,6-bis(2,3-epoxypropoxy)hexane	240-260-4	16096-31-4	Xi; R36/38 R43 R52/53	Xi; R: 36/38-43-52/53 S:(2-)36/37-61	2-9%
607-176-00-3	Mixture of: α -3-[3-(2H-benzotriazol-2-ilo)-5-tert-butyl-4-hydroksyfenylo]-propionylo- ω -hydroksypoli(oksyetylenu) i α -3-[3-(2H-benzotriazol-2-ilo)-5-tert-butyl-4-hydroksyfenylo]-propionylo- ω -3-[3-(2H-benzotriazol-2-ilo)-5-ter t-butyl-4-hydroksyfenylo]-propionyloxypoly(oxyethylene	400-830-7	104810-48-2+ 104810-47-1+ 25322-68-3	R43 N, R51/53	Xi, N R: 43-R51/53 S:(2-)36/37-61	1-2%

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. Rinse mouth with water. Medical help is required.**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.

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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

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:	milky
Smell:	characteristic
Boiling point:	>200°C
Flash-point:	>100°C
Autoignition point:	--
Explosion limits:	product is not explosive
Vapour pressure:	--
Density:	approx. 1.1 g/cm ³ (20°C)
Water solubility:	insoluble
Partition coefficient n-octanol/water:	--
Viscosity (rotating rheometer):	approx. 11 700 mPas (23°C)

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 Carbon monoxide, nitric oxides and other toxic gasses are generated as a

DECOMPOSITION PRODUCTS: 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 ₅₀ (rat, skin)	11400 mg/kg
CAS: 26761-45-5 2,3-epoxypropyl neodecanoate:	
LD ₅₀ (rat, oral)	9600 mg/kg
LD ₅₀ (rat, skin)	3800 mg/kg
CAS: 16096-31-4 1,6-bis(2,3-epoxypropoxy)hexane:	
LD ₅₀ (rat, oral)	8500 mg/kg
LD ₅₀ (rat, skin)	>4900 mg/kg

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

11. TOXICOLOGICAL INFORMATION

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
code of waste: 15 01 10* manufacturer.

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., 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, CLASS 9, UN 3082, PG III.
 EmS: F-A, S-F

ICAO/IATA: No data available.

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.

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.

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16. OTHER INFORMATION

Full text of the R-Phrases from section 2:

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.

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

R67 Vapours may cause drowsiness and dizziness

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