

SAFETY DATA SHEET

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

1.1 Identification of the product: ANTICORROSION EPOXY PRIMER

1.2. Use of the substance/mixture : Anticorrosion epoxy primer (component A) to be applied with a spray gun.

1.3. Manufacturer/supplier identification: RANAL Sp. z o.o. Tel: +48 34 329-45-03
 ul. Warszawska 36a Fax: +48 34 320-12-16
 42-240 Rudniki

Person responsible for the preparation of the safety data sheet e-mail: ranal@ranal.pl

1.4. Emergency telephone: +48 34 329-45-03 (from 8:00 to 16:00)

2. HAZARD IDENTIFICATION

HEALTH HAZARDS: Harmful product. Harmful by inhalation and in contact with skin. Irritating to skin.

DANGEROUS PROPERTIES: Highly flammable liquid. Avoid contact with strong oxidants.
Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

OTHER: No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Index No	Substance name	WE No	CAS No	Classification of the substance	Marking of the substance	Composition
603-074-00-8	Epoxy resin (molecular mass ≤ 700)	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	14-24%
606-004-00-4	Isobutyl-methyl ketone	203-550-1	108-10-1	F; R11 Xn; R20 Xi; R36/37 R66	F; Xn R: 11-20-36/37-66 S: (2-)9-16-29	4-9%
603-004-00-6	Butyl alcohol	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	2-6%
601-022-00-9	xylene	215-535-7	1330-20-7	R10 Xn, R20/21 Xi, R38	Xn R: 10-20/21-38 S: (2-)25	10-20%

4. FIRST-AID MEASURES

GENERAL INFORMATION: See 11 point Product Data Sheet.

INHALATION: Take the injured person out into the open air. Ensure calm, quiet surroundings, fresh air. In case of no breathing apply artificial respiration and seek medical advice.

SKIN: Take off soiled clothes. Wash off with plenty of lukewarm water at least 15 minutes.

EYES: Rinse immediately with plenty of water for at least 15 minutes. Contact ophthalmologist.

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

5. FIRE-FIGHTING MEASURES

FIRE EXTINGUISHING SUBSTANCES: Powder, foam resistant to alcohols, carbon dioxide, water mist.

SPECIAL HAZARDS: Fire may cause the generation of carbon monoxide, nitrogen oxides and other toxic gases.

PROTECTIVE EQUIPMENT: Fireman 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 of the 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 from getting 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 separate with bounds.

ACTION IN CASE OF SPILLAGE :

Eliminate the spillage (close the outflow of the liquid, seal), damaged containers should be placed in emergency containers. Remove the substance mechanically into an emergency container. For further disposal measures: see charter 13.

7. HANDLING AND STORAGE

HANDLING:

Keep away from heat and sources of fire. Do not smoke. Do not inhale vapours. Avoid contact with skin and eyes. Take precautionary measures against electrostatic discharges. Use only in well ventilated place.

STORAGE:

Keep in sealed containers in cool, well ventilated place. Storage in the vicinity of a large quantity of organic peroxides or strong oxidants is prohibited.

PARTICULAR USE:

See the technical product data sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective measures should respond to the requirements of the Regulation of Minister of Economy of 21st December 2005 regarding principal requirements for personal protective measures. (Law Gazette 2005 No 259, item 2173)

RESPIRATORY TRACT PROTECTION: Gas mask with „A” type absorbing canister according to EN 141

PROTECTION OF HANDS: Protective gloves (es. viton, nitrile). According to PN-EN 3743:1999

EYES PROTECTION: Protective glasses

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

WORKPLACE: Topical stays and exhausting ventilation.

Regulation of Minister of Labor and Social Policy, dated 26 September 1997, on behalf of general regulations of health and safety at work (Law Gazette No 129, item 844 with later amendment; Law Gazette 2022 No 91, item 811; uniform text Law Gazette 2003 No 169, item 1650 with later amendment; Law Gazette 2007 No 49, item 330.

Regulation of Minister of Health, dated 3 November 2008, changing the regulation of health and safety at work related to chemical factors present at a workplace (Law Gazette 2008 No 203, item 1275).

Medical examinations of workers in accordance with Health Code and according to Regulation of Minister of Health, dated 30 May 1996, on behalf of perform medical examinations of workers, the range of preventive health care for workers and medical opinions released for purposes stated in the Labour Code (Law Gazette 1996 No 69, item 332 with later amendment, Law Gazette 1998 No 159, item 1057 and Law Gazette 2001 No 37, item 451.

Values of the highest acceptable concentration according to Regulation of Minister of Labor and Social Policy, dated November 29th, 2002, on behalf of maximum acceptable concentration and intensity of harmful factors in a workplace (Law Gazette No 217, item 1833 with later amendment Law Gazette 2005 No 212, item 1769; Law Gazette 2007 No 161, item 1142: and Law Gazette 2009, No 105, item 873

CAS No	SUBSTANCE	NDS (mg/m ³)	NDSch (mg/m ³)	NDSP (mg/m ³)
71-36-3	Butyl alcohole	50	150	---
1330-20-7	xylene	100	---	---
108-10-1	Isobutyl – methyl ketone	---	---	---

Monitoring according to Regulation of Minister of Health, dated 20 April 2005 on behalf of research and measurements of harmful factors in a workplace for health in work environment (Law Gazette No 73, item 645 with later amendment; Law Gazette 2007 No 241, item 1772)

PN-EN 482:2009 Air in work environments -- General requirements regarding the measurement of chemical factors.

PN-EN-689: 2002. Air in work places – guidelines for estimating the risk of chemical inhalation con the basis of comparison with acceptable values and measurement strategy.

PN-Z-04008-7:2002 Air clarity protection. Taking samples . The rules of taking air samples in work environment and interpretation of results.

SEXPOSURE CONTROL/PERSONAL PROTECTION continued

PN-86/Z-04155.02 Air clarity protection – Tests for content of butyl alcohol – Marking isobutyl and n-butyl alcohol in a workplace using the method of gas chromatography.
PN-Z-04155-3:1994 Air clarity protection – Tests for content of butyl alcohol – Marking n-butyl alcohol in workplaces using the spectrophotometric method.
PN-78/Z-04116.01 Air clarity protection – Tests for content of xylene – Marking xylene in a workplace using the method of gas chromatography.
PN-86/Z-04165.02 Air clarity protection – Tests for content of methylbutylketone – Marking methylisobutylketone
In workplaces using the method of gas chromatography with enriching the sample.
PN-Z-04165-3:2001 Air clarity protection – Tests for content of methylbutylketone – Marking hexan-2-one in workplaces using the method of gas chromatography.

9. . PHYSICAL AND CHEMICAL PROPERTIES

Physical state: viscous liquid
Colour: grey
Smell: pungent, penetrating odour
Boiling point: 114-143°C
Melting point: -50°C
Flash point: 14°C
Autoignition point: about 440°C
Explosion limits: % lower: 1.0 vol% upper: 8.2 vol%
Vapour pressure: 11.6 hPa (20°C)
Density: about 1.5 g/cm³ (20°C)
Solubility in water: not soluble
Viscosity (rotary rheometer): 400-2000 mPas

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 alkalis
DANGEROUS DECOMPOSITION PRODUCTS: Carbon monoxide and other toxic gasses are generated as a result of thermal decomposition.

11. TOXICOLOGICAL INFORMATION (literature data)

Toxicological studies at the preparation are not available. Estimation on the basis of the data regarding dangerous components of the product.

TOXICITY:

xylene:	LD ₅₀ (rat, oral)	5000 mg/kg
	LC ₅₀ (rat, inhalation)	4550 ppm/4h
Butyl alcohol:	LC ₅₀ (rat, inhalation)	8000 ppm/4h
	TC _{LO} (human, inhalation)	25 mg/kg (irritation effect)
Isobutyl-methyl ketone	LD ₅₀ (rat, oral)	2080mg/kg
	LC ₅₀ (rat, inhalation)	100gm/m ³
Epoxy resin (molecular mass about <700):	LD ₅₀ (rat, skin)	11400 mg/kg

IRRITATING EFFECTS: Skin: irritating to skin and mucous membranes
Eyes: irritating.

SYMPTOMS OF POISONING: Headaches and dizziness, muscles weakness, drowsiness and in extreme cases loss of consciousness. If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting, and diarrhea.

12. ECOLOGICAL INFORMATION

Ecological studies at the preparation are not available. Estimation on the basis of the data regarding dangerous components of the product.

Butyl alcohol:	Number in catalogue of substances dangerous to water:	39
	Water hazard class:	1
xylene:	Estimation index for heavy toxicity towards	mammals: 1 fish: 2,9
	Number in catalogue of substances dangerous to water:	206
	Water hazard class:	2
	Estimation index for heavy toxicity towards	mammals: 3 fish: 4,1

The product is very poorly soluble in water. Keep away from the sewage system, surface water, underground water, and soil.

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 container should be carefully removed and hardened with a suitable hardener.

ATTENTION: remains should be hardened in small portions far from flammable substances.

During the chemical reaction much amounts of heat are produced! Hardened product is not a harmful substance.

CLEANED CONTAINER:

Carefully cleaned container is not a harmful waste.

CONTAINER PARTIALLY EMPTIED:

See remains of product. Container with not hardened remains is a harmful waste.

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. Harmful to aquatic environment.

ADR/RID: UN 1263 PAINT, 3, II.

UN No	Name of the raw material	Hazard identification number	Warning label required	Classification code	Packaging group
1263	FARBA	33	3	F1	II
IMDG- Code:		PAINT, class 3, UN 1263, packaging group II. SUBSTANCE CONTAMINATING SEA ENVIRONMENT.			
ICAO/IATA:		EmS: F-E, <u>S-E</u> no data available			

15. REGULATORY INFORMATION

Safety data sheet in accordance with:

Act on behalf of substances and chemical preparations, dated 11 January 2001 (Law Gazette No. 11, item 84 with later amendment Law Gazette 2006 No 120, item 826; Law Gazette 2009 No. 20, item 106 – uniform text, No. 152, item 1222 – uniform text.

Regulation of Minister of Health, dated 28 September 2005 on behalf of list of dangerous substances with their classification and marking (Law Gazette No. 201, item 1674, article 2).

Regulation of Minister of Health, dated 2 September 2003 on behalf of criteria and methods of classification of substances and chemical preparations (Law Gazette No. 171, item 1666 (article 2) with later amendments; Law Gazette 2004 No 243 item 2440; Law Gazette 2007 No 174, item 1222; Law Gazette 2009 No 43, item 353).

Order of Minister of Health, dated November 13th, 2007 on behalf of Safety Data Sheet (Law Gazette 2007 No 215, item 1588).

Regulation of Minister of Labor and Social Policy, dated 5 July 2004 on behalf of restrictions, prohibitions or conditions of production, trade or use of dangerous substances and harmful components and products that contain them (Law Gazette No 168, item 1762 with later amendment Law Gazette 2006 No 239, item 1731, Law Gazette 2007 No 1, item 1, Law Gazette 2007 No 116, item 806, Law Gazette 2008 No 190, item 1163).

Regulation of Minister of Labor and Social Policy, dated 1 December 2004 on behalf of substances, components, factors or technological processes of carcinogenic or mutagenic action in work environment (Law Gazette 2004 No 280, item 2771 with later amendment; Law Gazette 2005 No 160, item 1356).

Regulation of Minister of Health, dated 5 March 2009 on behalf of markings on packing of dangerous substances and chemical preparations and some chemical substances (Law Gazette 2009 No 53, item 439).

Regulation of Minister of Environment, dated 27 September 2001, on behalf of catalogue of waste material (Law Gazette No 112, item 1206 (art. 13)).

Regulation of Minister of Labor and Social Policy, dated 29 November 2002 on behalf of maximum permissible concentrations and intensity of harmful factors in work environment (Law Gazette No 217, item 1833, 2002 with later amendments; Law Gazette 2005 No 212, item 1769; Law Gazette 2007 No 161, item 1142 and Law Gazette 2009 No 105, item 873).

Regulation of Minister of Health, dated 20 April 2005, in the Matter of Admissible Concentrations and Intensity of Factors Harmful for Health in Workplace Environment (Law Gazette No 73, item 645 with later amendment Law Gazette 2007 No 241, item 1772 (article 8)).

Regulation of Minister of Health, dated 3 November 2008, amending the regulation on behalf of health and safety in work related to the presence of chemical factors in a workplace (Law Gazette 2008 No 203, item 1275 (article 8)).

15. . REGULATORY INFORMATION continued

Government Statement of 23rd March 2007 on behalf of coming into effect of amendments regarding Appendices A and B of the European Contract for international road transport of dangerous products, constructed in Geneva on 30th September 1957. (Law Gazette 2007 No 99, item 667 appendix: European contract regarding international road transport of dangerous products. ADR 2009-2011 (article 14), IMDG Code 2008 Edition (article 14)

Regulation (UE) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. Official Journal of the European Union L 136, dated May 29th, 2007, with later amendment OJ EU L 304 dated November 22nd, 2007, OJ EU L268 dated October 9th, 2008, OJ EU No 46 dated February 17th, 2009, OJ EU L164 dated June 26th, 2009. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008).

Commission Regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures. (OJ L 235, 05.09.2009)

CONTAINS: xylene, epoxy components. See producer's instruction.

SYMBOLS:



HAZARD SYMBOL:

Xn Harmful.
F Highly flammable

RISK PHRASES:

R11 Highly flammable
R20/21 Harmful by inhalation and in contact with skin.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES:

S (2-) Keep out of the reach of children.
S16 Keep away from sources of ignition - No smoking.
S 23 Do not breathe vapour/spray.
S 29 Do not empty into drains.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 38 In case of insufficient ventilation wear suitable respiratory equipment.
S 46 If swallowed, seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

Packaging has a touchable sign: Regulation of Minister of Health of 30th April 2004 on behalf of dangerous substances and products which have packagings difficult to open by kids and a touchable warning of danger (Law Gazette No 128, item 1348). Full text of the R-Phrases from section 2 and 3:

R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R22 Harmful if swallowed.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66 Repeated exposure may cause skin dryness or cracking.
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.

Amendments: General update.

Issued by: RANAL Sp. z o.o