

## 1. IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Identification of the preparation: RPS 45 Code: 62378, 62379, 62380  
1.2 Use of the preparation: Polyurethane sealer.  
1.3 Company:  
ROBERLO, S.A.  
Carretera N-II, Km. 706,5 - E-17457 - Riudellots de la Selva (Girona) - SPAIN  
Phone: +34 972 478060 - Fax: +34 972 477394 - info@roberlo.com – www.roberlo.com  
1.4 Emergency phone number: +34 91 5620420 (National Institute of Toxicology)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances taking part in a percentage higher than the exemption limit:

2,5-10 %	Xylene (mixture of isomers) R10 R38 R20/21	Xn	EC: 215-535-7 CAS: 1330-20-7 SAX: XGS000 No. 601-022-00-9
2,5-10 %	Solvent naphtha (petroleum), heavy aromatic R65 R66 R67 R51/53	Xn, N	EC: 265-198-5 CAS: 64742-94-5 No. 649-424-00-3
<2,5 %	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate R36/37/38 R42/43 R51/53 R23 T, N		EC: 223-861-6 CAS: 4098-71-9 SAX: IMG000 No. 615-008-00-5
<2,5 %	Isocyanate R14 R36/37/38 R42	Xn	CAS: --

For more information on dangerous ingredients, see sections 8, 11, 12 and 16.

## 3. IDENTIFICATION OF HAZARDS

This product is not considered dangerous. in accordance with Directive 67/548/EEC~2004/73/EC and 1999/45/EC~2001/60/EC.

## 4. FIRST AID MEASURES

When in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

4.1 By inhalation: Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.

4.2 By contact with the skin: Remove contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. Do not use solvents or thinners.

4.3 By contact with eyes: Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, until the irritation is reduced. Call a physician immediately.

4.4 By ingestion: In case of accidental swallowing, seek immediate medical attention. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest.

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## **5. FIRE-FIGHTING MEASURES**

5.1 Means of Extinction: Extinguishing powder or CO<sub>2</sub>. In the case of more important fires, also alcohol resistant foam and water spray/mist. Do not use for extinguishing: direct water jet.

5.2 Specific risks: Fire can produce a dense black smoke. As consequence of combustion or thermal decomposition, hazardous decomposition products may be produced, such as: carbon monoxide, carbon dioxide, nitrogen oxides. Exposure to combustion or decomposition products may be a hazard to health.

5.3 Fire-proof protective equipment: Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots.

5.4 Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

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## **6. ACCIDENTAL SPILLAGE MEASURES**

6.1 Personal precautions: Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. For exposure controls and personal protection measures, see section 8.

6.2 Environmental precautions: Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sews, inform the appropriate authorities in accordance with local regulations.

6.3 Cleaning-up methods: Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc.). The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises: water/ethanol or isopropanol/concentrated ammonia solution (d=0,880) = 45/50/5 parts by volume. Another possible (non-flammable) decontaminant is made up of water/sodium carbonate = 95/5 parts by weight. Add the same decontaminant to any residues and allow to stand for several days in an un-sealed container until no further reaction occurs. Keep the remains in a closed container. For subsequent waste disposal, follow the recommendations in section 13.

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## **7. HANDLING AND STORAGE**

7.1 Handling precautions: Comply with the health and safety at work laws.

- General recommendations: Avoid any type of leakage or escape. Keep the container tightly closed.

Recommendations for the prevention of fire and explosion risks: Vapours are heavier than air and may spread along floors to a considerable distance. Vapours can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Do not smoke. Electrical equipment should be protected to the appropriate standard. No tools with a potential for sparks should be used.

Flash point: 58°C Setaflash

Recommendations for the prevention of toxicological risks: People with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which isocyanate containing products are used. Do not eat, drink or smoke in application and drying areas. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.

7.2 Storage conditions: Prevent unauthorized access. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. In order to avoid leaks, the containers, after use, should be closed carefully and placed in a vertical position. Class of store: According to current legislation. Maximum storage period: 12 months. Temperature interval: min: 5°C, max: 32°C.

- Incompatible materials: Keep away from oxidizing agents, acids.

- Conditions to avoid: Heat: Keep away from sources of heat. Light: Avoid direct contact with sunlight. Humidity: Precautions should be taken to minimise exposure to atmospheric humidity or water, as carbon dioxide may be formed which, in closed containers can result in pressurisation. Care should be taken when re-opening partly used containers. Due to the sensitivity to humidity of the isocyanates, this product should be kept in the original container, or under pressure of dried nitrogen, for example.

- Type of packaging: According to current legislation.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION 98/24/EC

People with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which isocyanate containing products are used.

### 8.1 Occupational Exposure Limits:

INSHT 2005:

Spain	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Notes:
4098-71-9	0,005	0,046	-	-	Sen
1330-20-7	50	221	100	442	Dermal, VLB, VLI

INRS ND 2098, 02/2005:

France	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes:	TMP N°
4098-71-9	0,01	0,09	0,02	0,18	AR	62
1330-20-7	50	221	100	442	-	4bis, 84

DFG 2004:

Germany	Class:	MAK-ppm:	MAK-mg/m3:	Note:
4098-71-9	I, 1	0,01	0,092	Sah
1330-20-7	II,2	100	440	D

ACGIH 2004:

ACGIH(TLV)	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Note:	Note:
4098-71-9	0,005	0,045	-	-	-	-
1330-20-7	100	434	150	651	A4	S

2000/39/EC and 98/24/EC:

EC	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Notes:
1330-20-7	50	221	100	442	A4

8.2 Occupational exposure controls, Directive 89/686/EEC: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Protection of respiratory system: Avoid the inhalation of vapours. Mask: For short periods of work, you can consider the utilisation of a combination mask with gas and particle filters, type A2-P2 (EN141/EN143). In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers. If the working area is insufficiently ventilated, or when operators, whether spraying or not, are inside the spraybooth, compressed air-fed respiratory protective equipment (EN137) is required.

- Protection of eyes and face: Install emergency eye baths close to the working area. Goggles: Safety goggles with suitable lateral protection (EN166). Face shield: No.

- Protection of hands and skin: Install emergency showers close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred. Recommended gloves: polyethylene, polypropylene textile-lined, polyvinyl alcohol or nitrile rubber. Do not use PVC gloves. Boots: No. Apron: No. Clothing: Advisable. Wash contaminated work clothes before wearing them again.

8.3 Environmental exposure controls: Avoid any spillage in the environment of the product, wastes, packages or spraybooth sewages. Avoid any release into the atmosphere above the legal limits allowed.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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|------------------------|---------------------------|
| - Physical state:      | Paste                     |
| - Colour:              | White, black, grey, brown |
| - Specific gravity:    | 1,2 g/cc at 20°C          |
| - Solubility in water: | Not miscible              |
| - Flash point:         | 58°C Setaflash            |

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## **10. STABILITY AND REACTIVITY**

10.1 Stability: Stable under recommended storage and handling conditions.

10.2 Dangerous reactions: Possible dangerous reaction with oxidizing agents, acids. Exothermic reaction with amines and alcohols. Reacts with water under evolution of CO<sub>2</sub>.

10.3 Thermal decomposition: As consequence of thermal decomposition, hazardous products may be produced, including isocyanates.

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## **11. TOXICOLOGICAL INFORMATION**

No experimental toxicological data on the preparation is available.

11.1 Toxicological effects: Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Symptoms and signs include: headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Ingestion may result in the following effects: sore throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea; other effects may be as described for exposure to vapours. Repeated or prolonged contact with the solvents of the preparation, may cause removal of natural fat from the skin, resulting in non-allergic

contact dermatitis and absorption through the skin. Liquid splashes in the eyes may cause irritation and reversible damage.

Based on the properties of the isocyanate content of this product and existing technical data of similar preparations, it can be concluded that respiratory exposure may cause acute irritation and/or sensitization of the respiratory system, resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability. In case of prolonged contact, the skin can dry up and irritation could appear.

11.2 Dose and lethal concentrations for individual ingredients:

	DL50 Oral mg/kg	DL50 Cutaneous mg/kg	CL50 Inhalation mg/l.4hours
Xylene (mixture of isomers)	4300 Rat	1700 Rabbit	22 Rat
Solvent naphtha (petroleum), heavy aromatic	9000 Rat	3000 Rabbit	
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4825 Rat	1060 Rat	0,123 Rat

For more information about ingredients dangerous to health, see sections 2 and 8.

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## 12. ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available.

12.1 Spills on the soil: Prevent contamination of soil.

12.2 Spills in water: Do not allow to escape into drains, sewers or water courses.

- Hydrolysis: Reacts with water forming carbon dioxide and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by watersoluble solvents.

12.3 Emissions to the atmosphere: Avoid any solvent release into the atmosphere.

- VOC: 120 g/l ASTM D-3960

12.4 Ecotoxicological data for individual ingredients:

	CL50 mg/l.96hours	CE50 mg/l.48hours	CI50 mg/l.72hours
Xylene (mixture of isomers)	75 Fishes	16 Daphnia	

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## 13. CONSIDERATIONS FOR DISPOSAL

13.1 Handling of waste, Directive 75/442/EEC~91/156/EC: Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local/national regulations. For exposure controls and personal protection measures, see section 8.

13.2 Disposal of empty containers, Directive 94/62/EC: Emptied containers and packaging should be disposed of in accordance with currently local/national regulations.

13.3 Procedures for neutralising or destroying the product: Controlled incineration in special facilities for chemical waste, but in accordance with local regulations.

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## 14. TRANSPORT INFORMATION

PAINT RELATED MATERIAL (FP>23°C, viscous according to 2.2.3.1.5)

14.1 Land: Transport by road: ADR 2005  
Transport by rail: RID 2005

Good not submitted to Class 3.<sup>1</sup>

<sup>1</sup> Transport in accordance with 2.2.3.1.5 for viscous liquids in packages with capacity under 450 L

Transport document: Consignment paper  
Written instructions.

14.2 Sea: Transport by ship: IMDG 32-04

Class: 3 UN n°1263 Marine pollutant: no Packaging group: III

Emergency Sheet (EmS): 3-05, 07

First Aid Guide (MFAG): 310, 313

Transport document: Shipping Bill of Lading

14.3 Air: Transport by plane: IATA/ICAO

Class: 3 UN n°1263 Packaging group: III

Transport document: Air Bill of Lading

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## 15. INFORMATION ON REGULATIONS

15.1 EC Labelling:

This product does not require pictograms, in accordance with Directive 67/548/EEC~2004/73/EC and 1999/45/EC~2001/60/EC.

P91 Contains isocyanates. See information supplied by the manufacturer.

P99 Contains 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate and NONE249 Isocyanate. May produce an allergic reaction.

Dangerous ingredients: None in a percentage equal to or higher than the limit for the name.

15.2 Restrictions to the marketing and use in accordance with Directive 76/769/EEC: Not applicable.

15.3 Other regulations: Not available.

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## 16. OTHER INFORMATION

Intended use: Only for professional use.

Text of R-phrases listed in section 2:

R10 Flammable.

R14 Reacts violently with water.

R23 Toxic by inhalation.

R38 Irritating to skin.

R65 Harmful: may cause lung damage if swallowed.

R20/21 Harmful by inhalation and in contact with skin.

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

Indications for preparations containing isocyanates: Ready-to-use preparations containing isocyanates may have an irritant effect on mucous membranes -especially on breathing organs- and cause hypersensitivity reactions. Inhalation of vapour or spray mist may cause sensitisation. When handling preparations containing isocyanates all precautions required for solvent-containing preparations must be followed. Vapour and spray mist in particular should not be inhaled. Allergics and asthmatics, as well as people prone to respiratory ailments should not work with isocyanate-containing preparations.

Material Safety Data Sheet regulations: Material Safety Data Sheet in accordance with Directive 91/155/EEC~2001/58/EC.

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The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.

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