MATERIAL SAFETY DATA SHEET - according to european directive 2006/8/EC

and Regulation n. 1907/2006

Manufactured by: HARPO spa - Rialto division 34123 Trieste - Italy

Tech. Sheet N°.

RIALTO DURALBO SILOSSANICO Product name:

Revision nr. 6 dated: 01.10.2008



Xi R38, 41

01. IDENTIFICATION OF THE PREPARATION AND THE COMPANY/

1.1 Identification of the substance or preparation:

Product name: Rialto Duralbo silossanico.

1.2 Use of the substance/preparation:

Intended use: This product is a high vapour permeability and high water

repellency coating with a matt finish.

Chemical name and synonym: High built siloxane coating based on sand, pigments,

siloxane and copolymer emulsified resins.

1.3 Company Identification:

Name: HARPO spa. Via Torino, 34 Full address: 34123 - Trieste, Italy,

District and Country: tel. +39 040 3186611, fax +39 0403186666

E-mail address of the competent

person responsible for the Safety rialto@rialto-colors.com (rif. Dr. Renni - technical manager)

Data Sheet:

Product distribution by: Harpo spa

1.4 Telephone number for urgent

+ 39 040 2397211 (timetable: 8.00 - 16.30) inquiries:

02. HAZARD IDENTIFICATION

Substance/Preparation Classification.

This preparation is dangerous under 67/548/EEC and 1999/45/EC regulations and subsequent amendments (XXX ATP). This compound requires a safety data sheet according to the regulation 1907/2006 and the directive 2006/8/EC and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Danger Symbol:

Phrases R: 52/53

Danger identification.

Cas No 13463-41-7

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

03. COMPOSITION/INFORMATION ON INGREDIENTS

Concentrazione (C)	Classificazione
60 – 80 %	-
ce exposure limit	
1 0 – 1 5%	_
, ,	
· · · · · · · · · · · · · · · · · · ·	
2,5 – 3,5 %	-
kplace exposure limit	
0,0015 — 0,0025 %	N, R50/53
0,0015 - 0,0025 %	T, R22, R23
1	60-80~% ace exposure limit $1,0-1,5%$ ace exposure limit $2,5-3,5~%$ kplace exposure limit $0,0015-0,0025~%$

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CE No 236-671-3		N R50
Zinc oxide	0,009 - 0,010 %	N R50
Cas No 1314-13-2		
CE No 215-222-5		
2-octyl-2H-isothiazol-3-one	0,0008 - 0,0010 %	N R50/53
Cas No 26530-20-1		C R34
CE No 247-761-7		T R23/24
		Xn R22
		Xi R43

The complete text of -R – phrases is specified in section 16.

04. FIRST - AID MEASURES

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists seek medical attention. Wash contaminated clothing before using them.

INHALATION: Remove to fresh air. If breathing is irregular seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.



In all cases of doubt or if symptoms persist, seek medical advice. Never give anything by mouth to an unconscious person.

05. FIRE - FIGHTING MEASURES

Allow containers to cool in order to avoid product decomposition and generation of substances which might injure the health and be dangerous for safety reasons. Wear the fire equipment all the time

06. ACCIDENTAL RELEASE MEASURES

Limit the spreading of the spillage with inert absorbent material (sand, earth etc). Neutralize and remove as far as possible the treated mass; wash the remainder with plenty of water.

07. HANDLING AND STORAGE

Make sure that equipment is available for cooling the vessels, to prevent the danger of overpressure and overheating in the event of fire in the vicinity. Refer to the other sections of this data sheet for information relating to health and environmental risks.

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values:

Calcium and magnesium carbonate			
- TLV TWA	10	mg/m³	ACGIH
Titanium dioxide			
- TLV TWA	10	mg/m³	ACGIH
Propylen glicol			
TLV OEL (IRL)	10	mg/m ³	TWA/8h
TLV RV (LT)	7	mg/m ³	TWA/8h
TLV WEL (ÚK)	150	mg/m ³	TWA/8h

• The data refer to the substances and not to the mixture.

8.2 Exposure controls:

Adopt the closed circuit, if possible. If lacking, in order to avoid exposure and prevent its possible effects, even long-term, it is necessary to use adequate individual protective measures such as: masks, safety goggles, impermeable gloves and overalls, resistant to the product:

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Ensure that all the operators follow the recommended precautions. Attach a copy to the containers in which the product may be transferred and do not use the product if the working conditions do not correspond to the recommended precautions; avoid contact with the eyes and skin and prolonged breathing of the vapours; store the container sealed when not being used. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and take a shower at the end of the work shift. Working clothes should be washed separately and stored in a separate place. In order to prevent long-term effects, periodic health controls should be carried out even if not established by the Law, including supplementary examinations which are deemed necessary according to the discretion of the occupational physician.

09. PHYSICAL AND CHEMICAL PROPERTIES

Odour Slight

Physical appearance Coloured paste Solubility in solvents Partially miscible

Solubility in water Miscible

Volatile substances % by volume (solvents)

Hazardous reactions

N/A

Viscosity $19.000 \pm 500 \text{ mPas}$

Vapour density 1
Evaporation speed < 1
Comburent properties N.A.
Partition coefficient: noctanol/water N.A.

pH $8,2 \pm 0,20$ Boiling point > 150 °C Flash point N.A. Explosive properties N.A. Vapour pressure N.A.

Specific gravity 1,90 \pm 0,20 Kg/l Solid content (by weight) 81,00 \pm 2,00 %

VOC (Directive 2004/42/EC): < 2 % - 35 g/l

VOC (volatile carbon): < 2 % - 24,95 g/l

10. STABILITY AND REACTIVITY

The product is stable in normal conditions of use and storage. In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

Propylene glycol: it is hygroscopic, stable at normal conditions; at high temperatures, it tends to oxidize yielding propionaldehyde as well as lactic and acetic acid. Calcium carbonate: avoid contact with acids.

11. TOXICOLOGICAL INFORMATION

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled carefully according to good industrial practices. This compound may have slight health effects on sensitive people, by inhalation and/or cutaneous absorption and/or contact with eyes and/or ingestion.

PROPYLEN GLYCOL: oral LD50 (mg/kg) 20800 (RAT); dermal LD50 (mg/kg) 20800 (RAT) ZINC PYRITHIONE: LD50 orale (mg/kg) 774 mg/kg (ratto), LD50 cutaneo > 2000 mg/kg (ratto)

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2-OTTIL-2H-ISOTIAZOL-3-ONE: orale LD50 > 500 mg/kg (ratto), LD50 cutaneo > 900 mg/kg (ratto), per inalazione LC50/4h 0,27 mg/l (ratto)

12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid litter. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

13. DISPOSAL CONSIDERATIONS

Consider the possibility of burning the product in a suitable inceneritor. Acid or basic products must always be neutralized before undergoing any treatment, including biological treatment whenever feasible. If the waste is solid, it can be disposed of in a landfill.

14. TRANSPORT INFORMATIONS

This substance is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

15. REGULATORY INFORMATION

Warning symbols: None

Hazard sentences (R): R52/53 – Harmful to aquatic organisms, may cause long-term adverse effect in the aquatic environment.

Caution recommendations (S): None

This product is not subject to hazard labelling under the 67/548/EEC and 1999/45/EC directives and following amendments and adjustments (directive 2006/8/EC).

DIRECTIVE 2004/42/EC

Paint for exterior walls of mineral substrate (WB)

EU limit value for this product (A/c): 75 g/l (2007); 40 g/l (2010)

This product contains at maximum: 38 g/l of VOC

16. FURTHER INFORMATIONS

Text of -R- phrases quoted in section 3 of the sheet.

R22 HARMFUL IF SWALLOWED. R23 TOXIC BY INHALATION. R38 IRRITATING TO SKIN.

R41 RISK OF SERIOUS DAMAGE TO EYES. R50 VERY TOXIC TO AQUATIC ORGANISMS.

R50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

EFFECT IN THE AQUATIC ENVIRONMENT.

R23/24 TOXIC BY INHALATION AND IN CONTACT WITH SKIN.

R34 CAUSES BURNS.

R43 MAY CAUSE SENSITIIZATION BY SKIN CONTACT.

GENERAL BIBLIOGRAPHY

- 1. Regulation 1999/45/CE and following amendments:
- 2. Regulation 67/548/CEE and following amendments and adjustments (technical adjustment XXVIII);
- 3. Regulation 91/155/CEE and following amendments;
- 4. The Merck Index. 10th Edition;
- 5. Handling Chemical Safety;
- 6. Niosh Registry of Toxic Effects of Chemical Substances;
- 7. INRS Fiche Toxicologique (toxicological sheet);
- 8. Patty Industrial Hygiene and Toxicology;
- 9. N.I. Sax-Dangerous properties of Industrial Materials-7, 1989 Edition;

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Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not de regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review
The following sections were modified:
01 / 02 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 15/ 16