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Safety data sheet according to U.S.A. Federal Hazcom 2012

SECTION 1. Identification of the substance/mixture and of the company/undertaking.

1.1. Product identifier.

Code: MO5400
Product name. COLORWOOD

Chemical name and synonym. Polyurethane resin in aqueous emulsion

1.2. Relevant identified uses of the substance or mixture and uses advised against.

Intended use. Primer for wood

1.3. Details of the supplier of the safety data sheet.

Name. CARVER S.r.I. Unipersonale Full address. Via Papa Giovanni XXIII, 36

District and Country. 20090 Rodano (MI)

Italy

Tel. +39 (0)2 9500171 Fax. +39 (0)2 95320921

e-mail address of the competent person.

responsible for the Safety Data Sheet. sds@carver.it

Product distribution by: www.carver.it

1.4. Emergency telephone number.

For urgent inquiries refer to. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA toll free: +1-800-424-9300 CHEMTREC - MEXICO toll free: 01-800-681-9531

CHEMTREC - GLOBAL collect calls accepted: +1-703-527-3887

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200).

Hazard pictograms: --Signal words: --

Hazard statements: --

Precautionary statements:

Prevention:

P271 Use only outdoors or in a well-ventilated area.

Response:

Storage:

-

Disposal:

P501 Dispose of contents and/or containers to authorized waste treatment plants.

2.2. Other hazards.

Information not available.



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SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification. x = Conc. %. Classification:

Water

CAS. 7732-18-5 $50 \le x < 100$

EC. 231-791-2

INDEX.

TITANIUM DIOXIDE

CAS. 13463-67-7 $0 \le x < 25$

EC. 236-675-5

INDEX.

N° Reg. 01-2119489379-17

Organic solvent

CAS. $4 \le x < 5$

EC. INDEX.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed.

Specific information on symptoms and effects caused by the product are unknown.

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

^{*} There is a batch to batch variation.



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SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities.

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

USA OSHA-PEL Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.

USA CAL/OSHA-PEL California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits

(PELs).

TLV-ACGIH ACGIH 2016

			TITANIUM DIOXIDE						
Threshold Limit \	/alue.								
Туре	Country	TWA/8h		STEL/15r	min				
		mg/m3	ppm	mg/m3	ppm				
TLV-ACGIH	-	10							
OSHA	USA	15				INHAL.			
CAL/OSHA	USA	10				INHAL.			
CAL/OSHA	USA	5				RESP.			

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).



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SECTION 8. Exposure controls/personal protection.

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84 and OSHA 29 CFR 1910.134.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Initial boiling point. 100 °C. (212 °F)

Boiling range. Not available.

Flash point. > 100 °C. (212 °F)

Evaporation rate Not available. Flammability (solid, gas) not applicable Not available. Lower inflammability limit. Upper inflammability limit. Not available. Lower explosive limit. Not available. Upper explosive limit. Not available. Not available. Vapour pressure. Not available. Vapour density

Relative density. 1.05

Solubility miscible with water
Partition coefficient: n-octanol/water Not available.
Auto-ignition temperature. Not available.
Decomposition temperature. Not available.
Viscosity 10 - 14 sec. F4
Explosive properties Not available.
Oxidising properties Not available.

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.



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SECTION 10. Stability and reactivity. />

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

Information not available.

SECTION 11. Toxicological information.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects.

ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture:

LC50 (Inhalation - mists / powders) of the mixture:

LD50 (Oral) of the mixture:

LD50 (Dermal) of the mixture:

Not classified (no significant component).

Not classified (no significant component).

Not classified (no significant component).

TITANIUM DIOXIDE

 LD50 (Oral).
 > 5000 mg/kg Rat

 LD50 (Dermal).
 > 5000 mg/kg Rabbit

 LC50 (Inhalation).
 > 6.82 mg/l/4h Rat

SKIN CORROSION / IRRITATION.

Does not meet the classification criteria for this hazard class.

SERIOUS EYE DAMAGE / IRRITATION.

Does not meet the classification criteria for this hazard class.

RESPIRATORY OR SKIN SENSITISATION.

Does not meet the classification criteria for this hazard class.

GERM CELL MUTAGENICITY.

Does not meet the classification criteria for this hazard class.

CARCINOGENICITY.

Does not meet the classification criteria for this hazard class.

REPRODUCTIVE TOXICITY.

Does not meet the classification criteria for this hazard class.

STOT - SINGLE EXPOSURE.

Does not meet the classification criteria for this hazard class.

STOT - REPEATED EXPOSURE.

Does not meet the classification criteria for this hazard class.

ASPIRATION HAZARD.

Does not meet the classification criteria for this hazard class.

SECTION 12. Ecological information.

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



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SECTION 12. Ecological information.

12.1. Toxicity.

TITANIUM DIOXIDE

LC50 - for Fish. EC50 - for Crustacea.

EC50 - for Algae / Aquatic Plants.

> 100 mg/l/96h Oncorhynchus mykiss

> 100 mg/l/48h Daphnia magna

16 mg/l/72h Pseudokirchnerella subcapitata

12.2. Persistence and degradability.

TITANIUM DIOXIDE

Solubility in water.

Biodegradability: Information not available.

< 0.001 mg/l

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

Information not available.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.

The product 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.

14.1. UN number.

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code.

Information not relevant.



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SECTION 15. Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixtu	15.1.	Safety, he	alth and	environmental	regulations/leg	gislation s	pecific for	r the sub	stance or	mixtur
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U.S. Federal Regulations.

Clean Air Act Section 112(b):
No component(s) listed.

Clean Air Act Section 602 Class I Substances:

No component(s) listed.

Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act – Priority Pollutants:

No component(s) listed.

Clean Water Act – Toxic Pollutants:

No component(s) listed.

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

No component(s) listed.

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

No component(s) listed.

EPCRA 313 TRI:

No component(s) listed.

RCRA Code:

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations.

Massachussetts:

13463-67-7 TITANIUM DIOXIDE (Titanium dioxide (airborne, unbound particles of respirable size))

Minnesota:

13463-67-7 TITANIUM DIOXIDE (Titanium dioxide (airborne, unbound particles of respirable size))

New Jersey:

13463-67-7 TITANIUM DIOXIDE (Titanium dioxide (airborne, unbound particles of respirable size))

New York:

No component(s) listed.

Pennsylvania:



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SECTION 15. Regulatory information. .../

13463-67-7 TITANIUM DIOXIDE (Titanium dioxide (airborne, unbound particles of respirable size))

California:

No component(s) listed.

Proposition 65:

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. 13463-67-7 TITANIUM DIOXIDE C (Titanium dioxide (airborne, unbound particles of respirable size))

International Regulations.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None.

Candadian WHMIS.

Information not available.

SECTION 16. Other information.

LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh Registry of Toxic Effects of Chemical Substances



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SECTION 16. Other information. .../>>

- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- FPA website
- Hazard Comunication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

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 be 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.

Provide appointed staff with adequate training on how to use chemical products.