

SAFETY DATA SHEET

Product: YC.1402US - RETICULATION ADDITIVE FOR WB

Revision: 01

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1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the product: YC.1402US - RETICULATION ADDITIVE FOR WB

Supplier product code: YC.1402US

Recommended uses: Suitable for increasing physical and chemical resistance for water-based products.

Restrictions on use: There are not known restrictions on use of the product.

Supplier name: Renner Wood Coatings

Address: 651, Michael Wylie Drive, Charlotte - NC - USA

Telephone number: 1 704 527 9261

Emergency telephone number: 001 800 255 3924

Fax number: 1 704 527 9225

E-mail address: info@rennerwoodcoatings.com

2 - HAZARDS IDENTIFICATION

Most important hazards: May cause damage to kidneys through repeated or prolonged exposure if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. Toxic to aquatic life with long lasting effects.

Product effects

Adverse effects to the human health: May cause damage to kidneys through repeated or prolonged exposure if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects.

Environmental effects: Toxic to aquatic life with long lasting effects.

Physical and chemical hazards: It is not expected that product presents physical and chemical hazards.

Chemical product-specific hazards: It is not expected that product presents specific hazards.

Classification of the chemical product:
Eye Damage/Irritation - Category 1
Sensitization Skin - Category 1A
Germ Cell Mutagenicity - Category 2
Specific Target Organ Toxicity - Repeated Exposure - Category 2
Hazardous to the Aquatic Environment - Acute Hazard - Category 2
Hazardous to the Aquatic Environment - Chronic Hazard - Category 2

Classification system adopted: Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

Adequate labeling elements

Pictograms:





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Signal word:	DANGER
Hazard statement(s):	H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H341 Suspected of causing genetic defects. H373 May cause damage to kidneys through repeated or prolonged exposure if swallowed. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement(s):	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe mist or aerosol vapors. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves, protective clothing, eye protection and face protection. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/attention. P310 Immediately call a POISON CENTER or a doctor. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing. And wash it before reuse. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents and container in accordance with local regulations.

3 - COMPOSITION/INFORMATION ON INGREDIENTS**MIXTURE**

Components contributing to the hazard:	Trimethylolpropane, tris(3-(2-methylaziridinyl)propanoate) (CAS 64265-57-2): 75.000 - 100.000%
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4 - FIRST-AID MEASURES**Exposure routes**

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim feels unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this SDS.
Skin contact:	Wash exposed skin with sufficient amount of water to remove the material. Take off and isolate contaminated clothing and shoes. In case of skin irritation: contact a doctor. Bring this SDS.
Eye contact:	Wash carefully with water for several minutes. In case of use of contact lenses, remove them, if possible. Keep washing. If eyes irritation continues: Contact a doctor. Bring this SDS.



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Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse the victims mouth with water in abundance. If the victim feels unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this SDS.
Most important acute and/or anticipated delayed symptoms/effects:	Irritating to eyes burning, tearing and pain. May cause prurido e dermatite. Repeated exposure may cause damage to kidneys.
Protection of first-aiders and/or special notes to a physician:	Avoid contact with the product to help the victim. Keep victim warm and quiet. Symptomatic treatment should comprise mainly supportive measures such as correction of electrolyte disturbances, metabolic, and respiratory support. In case of skin contact do not rub the affected site.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Appropriate: Compatible with foam, water mist, powder and carbon dioxide (CO ₂). Inappropriate: Water jet directly.
Specific hazards arising from the chemical product:	The combustion or the chemical containers may form toxic and irritant gases such as carbon monoxide and carbon dioxide. Vapors may are heavier than air and tend to accumulate in low or confined areas, such as sewers and basements. Containers may explode if heated.
Special equipment for the protection of fire-fighters and specific extinguishing methods:	Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing. Containers and tanks involved in the fire should be cooled with water mist.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:	Do not smoke. Avoid exposure to the product. If necessary, use personal protective equipment as described in Section 8.
Protective equipment:	Use protective equipment as described in Section 8.
Emergency procedures:	It is recommended the installation of fire alarm system and leak detection in local storage and use of the product.
Environmental precautions:	Avoid that the spilled material reaches waterways or sewage system.
Methods and materials for containment and cleaning up:	Use water mist or vapor suppressing foam to reduce the dispersion of vapors. Use natural barriers or spill containment. Collect spilled material and put it into containers. Adsorb the remaining product with dried sand, vermiculite or any other inert material. Put the adsorbed material in appropriate containers and remove them to a safe place. Use tools that do not cause sparks to collect absorbed material. For final destination, proceed pursuant to Section 13 of this SDS.
Secondary disaster prevention measures:	Do not dispose directly into the environment or into the sewage system. The products resulting from fire control may cause pollution.

7 - HANDLING AND STORAGE

Handling



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Precautions for safe handling:	Handle in a well ventilated area or with general system of ventilation/local exhaust. Avoid vapors and mists formation.
Technical measures:	It is not expected that the product presents a fire or explosion hazard. Use personal protective equipment as described in Section 8.
Suitable precautions and prevention of contact:	Wash hands and face thoroughly after handling and before eating, drinking, smoking or going to the bathroom.
Storage	
Conditions for safe storage:	Store in a well ventilated place away from sunlight. Keep container closed. Keep away from high temperatures. Keep stored at room temperature not exceeding 35°C.
Technical measures:	Keep away from elevated temperatures and contact with incompatible materials.
Incompatible substances and mixtures:	Acids, oxidizing agents, anhydrides, strong base, acid chlorides, copper, isocyanates and copper alloys.
Packaging materials	
Recommended material:	Plastic
Inappropriate material:	Metal

8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Occupational exposure limit:	Not established.
Biological limit:	Not established.
Engineering controls measures:	Promote direct mechanical ventilation and exhaust system to the outside environment. These measures help reduce exposure to product.
Other limits:	Not established.

Appropriate personal protective equipment

Respiratory protection:	Protective mask with filter for organic solvents, ammonia, sulphur and mercury.
Hand protection:	Butyl rubber, nitrile rubber, latex, neoprene or PVC protective gloves.
Eye protection:	Safety glasses or face shield.
Skin and body protection:	Safety shoes, pants and long sleeves cotton shirt with clenched fists or protection of whole body against chemical splash.
Special precautions:	Not established.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, form and colour):	liquid
Odour and odour threshold:	Not available.
pH:	Not applicable
Melting point/freezing point:	Not available.
Boiling point, initial boiling and boiling range:	Not available.
Flashpoint:	Not available.
Evaporation rate:	Not available.
Flammability (soil, gas):	Not applicable.



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Upper/lower flammability or explosive limits:	Not available.
Vapour pressure:	Information regarding to: <u>-Trimethylolpropane, tris(3-(2-methylaziridinyl)propanoate):</u> 0.01 kPa (653°F)
Vapour density:	Not available
Density/relative density:	1.044 to 1.084 at 25°C (77°F)
Solubility(ies):	N. reacts with water.
n-octanol/water partition coefficient:	Not available.
Auto-ignition temperature:	Information regarding to: <u>-Trimethylolpropane, tris(3-(2-methylaziridinyl)propanoate):</u> 345°C (653°F)
Decomposition temperature:	Information regarding to: <u>-Trimethylolpropane, tris(3-(2-methylaziridinyl)propanoate):</u> 175°C (653°F)
Viscosity:	Not available.
Other information:	Not applicable.

10 - STABILITY AND REACTIVITY

Chemical stability:	Product is stable under normal conditions of temperature and pressure.
Hazardous reactions:	There are not known hazardous reactions with the product.
Conditions to avoid:	Elevated temperatures. Contact with incompatible materials.
Incompatible materials:	Acids, oxidizing agents, anhydrides, strong base, acid chlorides, copper, isocyanates and copper alloys.
Hazardous decomposition products:	There are no known hazardous decomposition products.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	It is not expected that the product presents acute toxicity.
Skin irritation/corrosion:	It is not expected that the product presents skin corrosion/irritation.
Eye damage/irritation:	Causes serious eye damage with burning, tearing and pain.
Respiratory or skin sensitization:	May cause an allergic skin reaction with prurido e dermatite. It is not expected that the product presents sensitization respiratory.
Reproductive cell mutagenicity:	Suspected of causing genetic defects.
Carcinogenicity:	It is not expected that the product presents carcinogenicity.
Reproductive toxicity:	It is not expected that the product presents reproductive toxicity.
Specific target organ toxicity - single exposure:	It is not expected that the product presents specific target organ toxicity by single exposure.
Specific target organ toxicity - repeated exposure:	May cause damage to kidneys through repeated or prolonged exposure if swallowed.
Aspiration Hazard:	It is not expected that the product presents aspiration hazard.



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12 - ECOLOGICAL INFORMATION

Environmental effects, behavior and fate of the product

Ecotoxicity:	Toxic to aquatic life with long lasting effects.
Persistence and degradability:	Due to the lack of data, it is expected that the product presents persistence and it is not considered readily biodegradable.
Bioaccumulative potential:	It is not expected that the product presents bioaccumulative potential in aquatic organisms.
Mobility in soil:	Not determined.
Other adverse effects:	There are not known other environmental effects for this product.

13 - DISPOSAL CONSIDERATIONS

Methods of disposal to the product waste/residues:	Must be disposed of as hazardous waste in compliance with local regulations. The treatment and disposal should be evaluated for each specific product. Keep the product remains in its original and properly closed containers. Disposal should be performed as established for the product.
Contaminated container/packaging:	Do not reuse empty containers. These may contain product residues and should be kept closed and sent for proper disposal as established for the product.

14 - TRANSPORT INFORMATION

International regulations

Land:	UN - "United Nations" Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations
Sea:	IMO - International Maritime Organization International Maritime Dangerous Goods Code (IMDG Code)
Air:	IATA - International Air Transport Association Dangerous Goods Regulation (DGR)
UN number:	Not classified as hazardous to transport in different modals.
Transport in bulk according to MARPOL 73/78, Annex II, and the IBC Code:	Consult regulations: - International Maritime Organization. MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2006. - International Maritime Organization. IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk: With Standards and guidelines relevant to the code. IMO, London, 2007.

15 - REGULATORY INFORMATION

Specific regulations for the chemical product:	Convention concerning Safety in the use of Chemicals at Work (Convention 170) - International Labour Organization, 1990; International Organization for Standardization - ISO 11014:2009.
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16 - OTHER INFORMATION

Elaboration date: 04/24/2015

Revision date: 08/20/2015



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Important information, but not specifically described in the previous sections:

This SDS was prepared based on current knowledge about the proper product handling and under normal conditions of use, in accordance with the application specified on the packaging. Any other use of the product involving their combination with other materials, and use various forms of those indicated, are the responsibility of the user. Warns that the handling of any chemical substance requires the prior knowledge of its hazards for the user. In the workplace it is for the user company's product promotes training of its collaborators about the possible risks arising from exposure to the chemical.

SDS elaborated in April 2015.

Hazard classification of chemical: Health: 3
Flammability: 0
Instability: 0
Specific: Probably not classified

Classification system adopted: National Fire Protection Association: NFPA 704.

Hazard classification of chemical: Health: 4*
Flammability: 0
Physical Hazard: 0
Personal Protection: G

Classification system adopted: National Paint & Coatings Association: NPCA.
NFPA 704:



HMIS:

HEALTH	*	4
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		G

Captions and abbreviations:

CAS - *Chemical Abstracts Service*



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