

BIOSYMPH LIMITED

MATERIAL SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: Rust Mechanic™
 Product Code: RM - xx
 Product Use: Paintable Rust Converter and Inhibitor
 New Zealand Supplier: Biosymph Limited
 Address: 2287 Kakaramea Road
 RD10 Whatawhata 3290
 Hamilton
 Telephone: +64 (0)7 829 8606 or +64 (0)22 607 6400 (mob)
 eMail: admin@biosymph.co.nz

Emergency Telephone: 0800 76 47 66 (National Poisons Centre)

Date of MSDS Preparation: 18 April 2018 version 1

Section 2. Hazards Identification

This substance is not classified as a dangerous good according to NZS5433: 2007

Pictograms

NONE REQUIRED

Prevention Code

P102 Keep out of reach of children
 P103 Read label or visit our website www.biosymph.co.nz before use
 P210 Keep away from heat and flames
 P233 Keep container tightly closed
 P273 Avoid release into the aquatic environment
 P280 Wear protective gloves / eye protection

Response Code

P303+361+353 IF ON SKIN: Wash with soap and water. If skin irritation occurs, get medical advice / attention.
 P304+312 IF INHALED: Remove to fresh air if breathing is labored.
 P332+313 If skin irritation occurs: Get medical advice
 P391 Collect spillage

Storage Code

P403+233 Store in a well-ventilated place. Keep container tightly closed.

Disposal Code

P501 Crush or puncture container to prevent further use if not recycled. Dispose of at an approved waste disposal site.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Tannic Acid	0.1-1	1401-55-4
2-Butoxyethanol	5	111-76-2
Binder alkyd polymer emulsion	94	

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

Section 4.	First Aid Measures
-------------------	---------------------------

Recommended on-site emergency facilities: Eye wash station

Routes of Exposure:

If in Eyes	Flush eyes with water for at least 15 minutes. Remove contact lenses if present and easy to do. If eye irritation develops or persists, get medical advice / attention.
If on Skin	Wash thoroughly with plenty of soap and water. Remove all contaminated clothing and launder separately before reuse. Get medical attention if irritation persists.
If Swallowed	May be harmful or fatal if swallowed. Rinse mouth with water. Give person 1-2 glasses of water. DO NOT INDUCE VOMITING unless directed by medical personnel. Never give anything by mouth to an unconscious person. Contact a physician or a Poison Control center immediately.
If Inhaled	Remove to fresh air and keep comfortable for breathing. If irritation occurs, get medical attention.

Most important symptoms and effects, both acute and delayed: None known.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention generally not required. Treat symptomatically.

Section 5.	Fire Fighting Measures
-------------------	-------------------------------

Suitable Extinguishing media	This product is water-based and will not burn.
Special Hazards Arising from the Chemical	This compound will not burn. Water fog may be used to cool the containers but do not spray directly into large containers of burning liquids as frothing may occur. Dense smoke and noxious or toxic fumes may be generated in a fire. The thermal decomposition products are highly dependent upon the combustion conditions. Noxious or toxic fumes may be generated, some of which may be toxic or irritating.
Special Equipment and Precautions for Fire-Fighters	Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

Section 6.	Accidental Release Measures
-------------------	------------------------------------

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate personal protective equipment. Use caution: slip hazard.

Environmental Hazards: Report spills and releases as required to appropriate authorities.

Methods and Material for Containment and Cleaning Up: Collect liquid spill with an inert absorbent material and place into a suitable container for disposal.

Section 7.	Handling and Storage
-------------------	-----------------------------

Precautions for Safe Handling: Product should be used within 12 months of purchase. Do not apply this product if the surface temperatures are below 1°C. Avoid contact with eyes, skin and clothing. Avoid prolonged skin contact. Wash thoroughly after handling. Do not transfer to unlabeled containers.

Precautions for Safe Storage: When not in use, keep container tightly closed. Keep away from children. Store in a cool, dry place protected from freezing or temperatures above 55°C. Store away from extreme heat and open flames. Store away from oxidizers. Do not store in unmarked containers. Rinse thoroughly with water before recycling container. Dispose of contents in accordance with local, regional and national regulations.

Section 8	Exposure Controls / Personal Protection
------------------	--

Chemical Name	Exposure Limits
Tannic acid	OSHA PEL: Not established
2-Butoxyethanol	OSHA PEL, 25 ppm, skin ACGIH TLV, 25 ppm, skin

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the exposure limits.

Individual Protection Measures: If spraying, wear a NIOSH approved Organic vapor respirator. Wear protective gloves.

Respiratory Protection: In operations where the occupational exposure limits are exceeded, a NIOSH approved respirator with organic vapor/particulate cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin Protection: Impervious gloves such as rubber or nitrile recommended where needed to avoid prolonged skin contact.

Eye Protection: Safety glasses or goggles recommended where needed to avoid eye contact.

Section 9	Physical and Chemical Properties
------------------	---

Appearance:	Salmon Pink coloured liquid
Odour:	mild
Odour Threshold:	not established
pH:	1.5-3.5
Water Solubility:	50%
Vapour Density (air=1):	not available
Melting point / Freezing point	not available
Boiling point:	102°C, estimated
Flash Point:	not flammable
Specific Gravity:	1.06
Vapour Pressure:	not established
VOC Content:	<4.0%
Evaporation Rate:	not available
Explosion Properties:	none
Oxidising Properties:	not oxidizing
Aerosol Fire Protection Level:	not applicable
Octanol / Water Partition Coefficient:	not available

Decomposition Temperature: not available
 Autoignition Temperature: not available
 Viscosity: not available

Section 10. Stability and Reactivity

Reactivity: Not reactive under normal conditions of use.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known

Conditions to Avoid: Use with strong oxidizing chemicals and alkalis.

Incompatible Materials: Avoid strong oxidizing agents and acids.

Hazardous Decomposition Products: The thermal decomposition products are highly dependent upon the combustion conditions. Noxious or toxic fumes may be generated, some of which may be toxic or irritating.

Section 11 Toxicological Information

Potential Health Effects:

Eye: May cause mild irritation.

Skin: Prolonged contact may cause mild irritation of the skin.

Inhalation: No adverse effects expected at ambient temperatures.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhoea. Refer to Section 4 for additional information.

Chronic Hazards: No data

Carcinogen Status: None of the components of this product are listed as carcinogens by IARC, NTP or OSHA.

Section 12. Ecotoxicological Information

Ecotoxicity:

The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Tannic Acid	Not listed	37 mg/L LC50, 96h	Not listed	Not listed
2-Butoxyethanol	Not listed	>100 mg/L, LC50 96 h.	Not listed	Not listed

Bioaccumulative Potential: Not expected to bioaccumulate

Mobility in Soil: No Data

Other Adverse Effects: No Data

Section 13. Disposal Considerations

Waste disposal: Dispose of in a responsible manner. Follow local, state and federal guidelines. Do not discharge into sewers or waterways. Incineration is the preferred method of disposal, although it may be land filled at an approved facility.

Section 14	Transport Information
-------------------	------------------------------

Classified as a NON-Dangerous Good for transport.

Section 15	Regulatory Information
-------------------	-------------------------------

ERMA Approval Code:	HSR002662
HSNO Controls:	
Tracking:	Not required
Approved Handlers:	Not required
Location Test Certificate:	500 L in containers \geq 5L; 1500 L in containers $<$ 5L; 250 L open
Hazchem signage:	1000 L
Emergency Response Plan:	10,000 L

Section 16	Other Information
-------------------	--------------------------

Abbreviations:

CAS No	Chemical Abstracts Number
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
WES	Workplace Exposure Standard

References:

Supplier Material Safety Data Sheets

EPA website: www.epa.govt.nz

Hazardous Substances Data Bank (HSDB), a database of the National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov>).

Disclaimer:

This document has been compiled by Biosymph Limited and serves as the manufacturer's Material Safety Data Sheet ('MSDS'). It is based on information concerning the product which has been provided from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. While Biosymph Ltd has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Biosymph Ltd accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS. The information herein is given in good faith, but no warranty, express or implied is made.

This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority.

Please consult the relevant legislation and regulations governing the use and storage of this type of product.

For further information, please contact Biosymph Ltd.

Issue Date: 18 April 2018

Review Date: 18 April 2023

END OF MATERIAL SAFETY DATA SHEET