

RUSFRE®RUSFRE
604 McGEACHIE DRIVE
MILTON, ONTARIO, L9T 3Y5**PRODUCT: RF1001-4 RUST CONVERTER****SECTION 01: IDENTIFICATION**

Initial supplier identifier..... RUSFRE
604 McGeachie Drive
Milton
Ontario
L9T 3Y5

Product identifier..... RF1001-4 RUST CONVERTER

Recommended use and restrictions on .. Rust proofing.
use

Chemical family..... Mixture.

NFPA rating..... Health: 2 Fire: 1 Reactivity: 0.

HMIS..... H: 2 F: 1 R: 0.

24 hour emergency number..... For transportation emergencies (in Canada) call CANUTEC 1-888-226-8832 (CAN-UTEC);
IN THE UNITED STATES CALL CHEMTREC 1-800-424-9300.
** For medical emergencies contact your local poison control centre **.

SECTION 02: HAZARD IDENTIFICATION

Signal Word..... WARNING.

Hazard Classification..... Flammable Liquid 4. Skin Sensitizer — Category 1. Eye Irritation — Category 2A.

Hazard Description..... H227 Combustible liquid. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

Prevention..... P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P261 Avoid breathing mists, vapours and sprays. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves and eye protection.

Response P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P305 + P351 + P338 If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until medical help arrives. P302 + P352 - If on skin: wash with plenty of water. P333 + P313 If skin irritation or rash occurs, get medical advice/attention. P362 + P364 - Take off contaminated clothing and wash before reuse. P337 + P313 - If eye irritation persists get medical attention. P321 - For specific treatment see section 4 on this SDS.

Storage..... P403 Store in a well ventilated area.

Disposal..... P501 Dispose all unused, waste or empty containers in accordance with local regulations.

Note This product mixture has been classified based on its ingredients.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
2-Butoxyethyl Acetate	112-07-2	1-5
Tannins	1401-55-4	
Ethanedial	107-22-2	<0.2

SECTION 04: FIRST-AID MEASURES

Eye contact..... In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. If irritation persists, obtain medical attention.

Skin contact..... Remove all contaminated clothing and immediately wash the exposed areas with copious amounts of water for a minimum of 30 minutes or up to 60 minutes for critical body areas. Remove contaminated clothing and launder before reuse.

PRODUCT: RF1001-4 RUST CONVERTER**SECTION 04: FIRST-AID MEASURES**

Inhalation.....	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion.....	If ingestion is suspected, contact physician or poison control center immediately. Do not induce vomiting. If spontaneous vomiting occurs have victim lean forward with head down to prevent aspiration of fluid into the lungs. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, whether acute or delayed	Can cause skin sensitization. Causes eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation.
Additional information.....	Treat victims symptomatically. Use good hygiene practices. In the event of an incident involving this product ensure that medical authorities are provided a copy of this safety data sheet.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media	"Alcohol" foam, CO ₂ , dry chemical. In cases of larger fires, water spray should be used. Do not use water in a jet.
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products	Oxides of carbon (CO, CO ₂). Nitrogen compounds. Hydrocarbon fumes and smoke.
Special protective equipment and precautions for fire-fighters	Firefighter should be equipped with self-contained breathing apparatus and full protective clothing to protect against potentially toxic and irritating fumes. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture. Keep run-off water from entering sewers and other waterways. Dike for water control.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak/spill.....	Ventilate. Eliminate all sources of ignition. Contain the spill. Avoid all personal contact. Evacuate all non-essential personnel. Wear proper protective equipment. Prevent runoff into drains, sewers, and other waterways. Absorb with an inert dry material and place in an appropriate waste container. Spilled material and water rinses are classified as chemical waste, and must be disposed of in accordance with current local, provincial, state, and federal regulations.
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SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....	Keep away from heat, sparks, and open flame. Always adopt precautionary measures against build-up of static which may arise from appliances, handling and the containers in which product is packed. Ground handling equipment. Avoid breathing vapours or mist. Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Handle and open container with care. Employees should wash hands and face before eating or drinking.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks, and open flames. Store away from oxidizing and reducing materials. Keep container closed when not in use. Store away from sunlight.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	NIOSH REL
2-Butoxyethyl Acetate	20 ppm TLV	Not established	Not established	Not established	5 ppm
Tannins	Not established	Not established	Not established	Not established	Not established
Ethanedial	0.1 mg/m ³ 0.1 mg/m ³ (WEEL)		Not established		
Personal Protective Equipment					
Respiratory/type.....	Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.				
Eye/type.....	Liquid chemical goggles. Chemical safety goggles and full faceshield if a splash hazard exists.				
Gloves/ type.....	Chemical resistant gloves.				
Clothing/type.....	Wear adequate protective clothes.				
Footwear/type.....	Safety boots per local regulations.				
Other/type.....	Emergency showers and eye wash stations should be available. Employees should wash their hands and face before eating, drinking, or using tobacco products.				

PRODUCT: RF1001-4 RUST CONVERTER**SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Appropriate engineering controls..... Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. Local mechanical exhaust ventilation should be used at sources of air contamination, such as open process equipment, or during purging operations, to capture gases and fumes that may be emitted. Standard reference sources regarding industrial ventilation (ie. ACGIH industrial ventilation) should be consulted for guidance about adequate ventilation.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state..... Liquid.
 Colour..... No data.
 Odour..... Mild. Fruity odour.
 Odour threshold (ppm)..... Not available.
 Vapour pressure (mm Hg)..... No data.
 Vapour density (air=1)..... No data.
 pH..... No Data.
 Density..... 9.25 lbs/USG; 1.108.
 Melting / Freezing point (deg C)..... Not Available.
 Solubility..... Miscible.
 Initial boiling point / boiling range (deg C). 100°C.
 Evaporation rate..... Not available.
 Flash point (deg C), method..... 71. (estimate; lowest flash point ingredient).
 Auto ignition temperature (deg C)..... Not available.
 Upper flammable limit (% vol)..... 12.7.
 Lower flammable limit (% vol)..... 0.6.
 Partition coefficient — n-octanol/water..... Not available.
 % Volatile by volume..... 53.47.
 VOC..... 0.52 lbs/USG.
 Viscosity..... Not available.

SECTION 10: STABILITY AND REACTIVITY

Chemical stability..... Stable at normal temperatures and pressures.
 Reactivity Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong oxidizing agents.
 Possibility of hazardous reactions..... Hazardous polymerization will not occur.
 Conditions to avoid, including static Keep away from heat. Incompatible with strong oxidizers. Strong bases.
 discharge, shock or vibration
 Hazardous decomposition products..... By fire:. Oxides of carbon (CO,CO2). Nitrogen oxides. Dense black smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
2-Butoxyethyl Acetate	> 450 ppm rat 6h	1,600 mg/kg rat oral 1,480 mg/kg rabbit dermal
Tannins	Not available	Not available
Ethanedial	Not established	Not established
Route of exposure.....	Eye contact. Skin contact. Inhalation.	
Effects of chronic exposure.....	Breathing high concentrations of vapour may cause anesthetic effects and serious health effects.	
Skin contact.....	May cause skin irritation.	
Skin absorption.....	May be absorbed by the skin.	
Eye contact.....	Can cause redness, irritation, tissue destruction.	
Inhalation (acute).....	Breathing of high vapour concentrations may cause anesthetic effects and serious health effects.	
Ingestion.....	May be harmful if swallowed. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.	
Carcinogenicity of material.....	Tannis/tanic acid: IARC Group 3.	
Sensitizing capability of material.....	May cause sensitization by skin contact.	
Reproductive effects.....	None.	

SECTION 12: ECOLOGICAL INFORMATION

Environmental..... Do not allow to enter waters, waste water or soil.
 Persistence and degradability..... Not available.

PRODUCT: RF1001-4 RUST CONVERTER**SECTION 13: DISPOSAL CONSIDERATIONS**

Information on safe handling for disposal and methods of disposal, including any contaminated packaging

This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations.

SECTION 14: TRANSPORT INFORMATION

TDG Classification.....	Not regulated.
DOT Classification (Road).....	Not regulated.
IATA Classification (Air).....	Not regulated.
IMDG Classification (Marine).....	Not regulated.
Marine Pollutant.....	Potential marine pollutant.
Proof of Classification.....	In accordance with Part 2.2.1 of the Transportation of Dangerous Goods Regulations (July 2, 2014) - we certify that classification of this product is correct. .

SECTION 15: REGULATORY INFORMATION

CEPA status.....	Not determined.
TSCA inventory status.....	All components are listed.
OSHA.....	This product is considered hazardous under the OSHA Hazard Communication Standard.
SARA Title III	
Section 302 - extremely hazardous substances	None.
Section 311/312 - hazard categories.....	Immediate health.
Section 313.....	None.
EPA hazardous air pollutants (HAPS)	None.
40CFR63	
California Proposition 65.....	*WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. (Benzene (Dev)). (Toluene). *WARNING: This product contains a chemical known to the State of California to cause cancer. (Benzene). (Ethyl benzene).

SECTION 16: OTHER INFORMATION

Prepared by:	REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com .
Telephone number:.....	(800) 387-7981.
Disclaimer:.....	DISCLAIMER: All information appearing herein is based upon data obtained from experience and recognized technical sources. To the best of our knowledge, it is believed to be correct as of the date of issue but we make no representations as to its accuracy or sufficiency and do not suggest or guarantee that any hazards listed herein are the only ones which exist. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. The information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.
Date of the latest revision of the safety data sheet ..	2018-04-12