

SAFETY DATA SHEET

Prepared according to USA OSHA Hazcom 2012 / Canada WHMIS 2015



Date Prepared : 11/12/2015

SDS No : BRO1 Rust Off Rust Converter_ENG

Date Revised : 05/31/2017

Revision No : 1

BRO1 RUST OFF! Rust Converter

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: BRO1 RUST OFF! Rust Converter

Product Description: Rust Converter, 4 L / 1.06 gal US

General Use: Rust Converter

Product Stock/Code: BRO1 / 10043

Chemical Family: Phosphoric acid aqueous solution / La solution aqueuse d'acide phosphorique

Molecular Formula: Mixture / Mélange

Manufacturer / Supplier

Dominion Sure Seal Ltd.
6175 Danville Road, Mississauga
Ontario, Canada L5T 2H7
Fax: 905-670-5174
www.dominionsureseal.com

Customer Service: 905-670-5411

Emergency Telephone Numbers (24 hour)

CANUTEC : (613) 996-6666

CHEMTREC : (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

The classification and label elements stated below were prepared in accordance with the USA OSHA Hazard Communication Standard (29 CFR 1910.1200; Hazcom 2012) and the Canadian WHMIS regulations (Hazardous Products Regulations; WHMIS 2015). This information may be different from the actual product label information for labels that are regulated by other agencies.

Health hazards:

Skin Corrosion, Category 1B

Serious Eye Damage, Category 1

Target Organ Toxicity (Single exposure), Category 3 (Narcotic Effects)

Physical hazards:

Flammable Liquids, Category 3

Label elements

Hazardous components for labelling:

Phosphoric acid, Isopropyl alcohol and Tannins



Corrosion



Flame



Exclamation
mark

Signal Word: DANGER

Hazard statement(s)

H226: Flammable liquid and vapour.
H314: Causes severe skin burns and eye damage.
H336: May cause drowsiness or dizziness.

Precautionary statement(s)

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating and lighting equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P280: Wear protective gloves, protective clothing and eye protection.
P264: Wash hands thoroughly after handling.
P260: Do not breathe mist, vapours or spray.
P271: Use only outdoors or in a well-ventilated area.

Response:

P308+P313: IF exposed or concerned: Get medical advice/ attention.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P363: Wash contaminated clothing before reuse.
P310: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P370+P378: In case of fire: Use dry chemical or foam to extinguish.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.
P233: Keep container tightly closed.
P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with applicable local, regional and/or national regulations.

Hazards Not Otherwise Classified: No data available.

Emergency Overview

Immediate concerns: Flammable liquid and vapor. Causes severe skin and eye burns. Vapours may cause drowsiness and dizziness. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches).

Comments: See sections 9 and 10 for more detailed information on physicochemical effects.
See section 11 for more detailed information on health effects.
See sections 12 for more detailed information on environmental effects.

The actual container label may not include the above label elements. The labeling shown above applies to products used solely for industrial / professional use.

Consumer products should be labeled in accordance with the Canadian Consumer Chemicals and Containers Regulations and US Consumer Product Safety Commission regulations. Consumer product labeling takes

BR01 RUST OFF! Rust Converter

precedence over Canadian WHMIS 2015 and OSHA Hazcom 2012 Hazard Communication labeling.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS number
Water (non-hazardous ingredient)	44 - 50	7732-18-5
Phosphoric acid	23 - 27	7664-38-2
Isopropyl alcohol	18 - 22	67-63-0
Tannins	7 - 9	1401-55-4

Comments: There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the product and hence require reporting in this section.

4. FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Inhalation: If affected by inhalation of vapour, move to fresh air. Get medical attention if symptoms persist.

Signs and Symptoms of Overexposure

Eye Contact: Corrosive. Will cause eye burns and permanent tissue damage.

Skin Contact: Contact causes severe skin irritation and possible burns.

Ingestion: Corrosive and may cause severe and permanent damage to mouth, throat and stomach.

Inhalation: Causes respiratory tract irritation. Fumes and spray mist may be harmful. May cause central nervous system depression.

Notes to Physician: Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Additional Information: No data available.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Product can be ignited by static discharge. May react with metals and lead to the formation of flammable hydrogen gas.

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Fire Fighting Procedures: Containers can build up pressure if exposed to heat (fire).

Fire Fighting Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Sensitivity to Static Discharge: Product is sensitive to static discharge.

Sensitivity to Mechanical Impact: Product is not sensitive to mechanical impact.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Eliminate all ignition sources. Ensure adequate ventilation. May be neutralized with slaked lime or sodium bicarbonate. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Sweep up material being careful not to raise dust. Place in an appropriate disposal container and seal tightly. Wash area with soap and water.

Environmental Precautions

Water Spill: Do not flush to sewer.

Land Spill: Avoid runoff into storm sewers and ditches which lead to waterways.

Special Protective Equipment: Clean up spills immediately, observing precautions in Protective Equipment section 8.

7. HANDLING AND STORAGE

General Procedures: Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. Ensure thorough ventilation of stores and work areas.

Handling: Do not use in the presence of open flame or spark. Use only in a well ventilated area. Wear recommended personal protective equipment. Keep container closed when not in use. Avoid breathing vapours or mist. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.

Storage: Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Protect from physical damage. Keep container tightly closed and in a well-ventilated place. Store in a cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

OSHA / WHMIS 2015 HAZARDOUS COMPONENTS				
Occupational Exposure Limits				
Chemical Name	Type		ppm	mg/m ³
Phosphoric acid	OSHA PEL	TWA	--	1
		ACGIH TLV	TWA	--
	NIOSH REL	STEL	--	3
		TWA	--	1
	ACGIH TLV	STEL	--	3
		TWA	400	980
Isopropyl alcohol	ACGIH TLV	TWA	200	491
		STEL	400	984
	NIOSH REL	TWA	400	980
		STEL	500	1225
Tannins	USA OEL	TWA	[1]	[1]

Footnotes:

1. This material does not have established exposure limits in the USA under OSHA, NIOSH, ACGIH.

Engineering Controls: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Avoid breathing mists; if general ventilation or local exhaust is inadequate, persons exposed to mists should wear approved breathing devices. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Eyes and Face: Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.

Skin Contact: Wear chemical resistant gloves.

Respiratory: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Protective Clothing: Wear protective clothing as necessary to prevent contact.

Work Hygienic Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Liquid
Odor	: Pleasant, characteristic
Odor Threshold	: No data available.
Appearance	: Mobile liquid
Color	: Brown
pH	: 1.5
% Volatiles	: 64 to 70 % w/w
Flash Point and Method	: 29°C Setaflash Closed Cup
Flammable Limits	: 2.0 to 12.0
Notes:	Based on data for isopropyl alcohol.
Autoignition Temperature	: 456°C
Notes:	Based on data for isopropyl alcohol.
Vapor Pressure	: 4.4 kPa [isopropyl alcohol] at 20°C
Vapor Density	: > 1 (air = 1)
Boiling Point	: 83°C (Isopropyl alcohol)
Freezing Point	: No data available.
Melting Point	: No data available.
Solubility in Water	: Soluble
Evaporation Rate (n-butyl acetate = 1)	: > 1
Density	: 1.12±0.03g/ml at 20°C
Viscosity	: No data available.
VOC Content	: < 25% w/w
Oxidizing Properties	: None

10. STABILITY AND REACTIVITY**Reactive Hazard** : No**Hazardous Polymerization:** Not expected to occur.**Stability:** Stable.**Conditions to Avoid:** Keep away from flames and incompatible materials.**Possibility of Hazardous Reactions:** No data available.**Hazardous Decomposition Products:** By fire and high heat: Carbon monoxide, Carbon dioxide, Oxides of nitrogen and other undetermined compounds.**Incompatible Materials:** Oxidizing materials. Metals. Alkalis.**11. TOXICOLOGICAL INFORMATION****Acute Toxicity**

Chemical Name	Oral LD ₅₀ mg/kg(rat)	Dermal LD ₅₀ mg/kg(rabbit)	Inhalation LC ₅₀ mg/l
Phosphoric acid	1530	2740	1.69(rat;1h-mist)
Isopropyl alcohol	4710-5840 4475(mouse) 5030(rabbit)	12,870	51.0(rat;8h) 72.6(rat;4h)
Tannins	No data available.	No data available.	Not Applicable

Acute Toxicity - Dermal LD₅₀: Based on available ingredient data, the classification criteria for Acute Dermal Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.**Acute Toxicity - Oral LD₅₀:** Based on available ingredient data, the classification criteria for Acute Oral Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.**Acute Toxicity - Inhalation LC₅₀:** Based on available ingredient data, the classification criteria for Acute Toxicity - inhalation are not met for this mixture. The calculated ATE is >20 mg/l/4h (vapours).**Notes:** 10% of the mixture consists of an ingredient or ingredients of unknown acute toxicity. No additional toxicology information is available for this product itself. (See Component Toxicity Information).**Skin Irritation / Corrosion:** Contains: Phosphoric acid. The mixture is classified as: Skin Corrosive, category 1, based on summation of ingredient data (>5% ingredients classified as skin corrosive, category 1). Corrosive, causes permanent skin damage (scarring).**Eye Irritation / Serious Eye Damage:** Contains: Phosphoric acid. The mixture is classified as: Eye Damage, category 1, based on summation of ingredient data (> 3% ingredients classified as skin and/or eye category 1). Corrosive. Will cause eye burns and permanent tissue damage.**Respiratory / Skin Sensitizer:** Based on available data, the classification criteria for respiratory sensitization are not met for this mixture (< 0.1% ingredients classified as a respiratory sensitizer, category 1 or sub-category 1A and < 1.0% ingredients classified as a respiratory sensitizer, sub-category 1B). Based on available data, the classification criteria for skin sensitization are not met for this mixture (< 0.1% ingredients classified as a skin sensitizer, category 1 or sub-category 1A and < 1.0% ingredients classified as a skin sensitizer, sub-category 1B).**Germ Cell Mutagenicity:** Based on available data, the classification criteria for Germ Cell Mutagenicity are not met for this mixture (< 0.1% ingredients classified as Germ Cell Mutagen, category 1A or 1B and < 1.0% ingredients classified as Germ Cell Mutagen, category 2).**Carcinogenicity**

BR01 RUST OFF! Rust Converter

Chemical Name	NTP status	IARC status	OSHA status	Other
Phosphoric acid	--	--	--	--
Isopropyl alcohol	--	3	--	--
Tannins	--	3	--	--

Notes: Based on available data, the classification criteria for Carcinogenicity are not met for this mixture (< 0.1% ingredients classified as a Carcinogen, category 1 or 2).

Reproductive Toxicity: Based on available data, the classification criteria for Reproductive Toxicity are not met for this mixture (< 0.1% ingredients classified as Reproductive Toxicity, category 1 or 2).

Specific Target Organ Toxicity - Single Exposure: Contains: Isopropyl alcohol. The mixture is classified as: Specific Target Organ Toxicity - Single Exposure, category 3, based on summation of ingredient data using the applicable cut-off/concentration limits ($\geq 20\%$ summation of all ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 3 [Narcotic Effects]). Can cause central nervous system depression (including unconsciousness). High vapor concentrations may cause drowsiness. May cause headaches and dizziness.

Specific Target Organ Toxicity - Repeated Exposure: Based on available data, the classification criteria for Specific Target Organ Toxicity - Repeated Exposure are not met for this mixture (< 1.0% ingredients classified as Specific Target Organ Toxicity - Repeated Exposure, category 1 or 2).

Aspiration Hazard: Based on available data, the classification criteria for Aspiration Hazard are not met for this mixture (< 10% ingredients classified as an Aspiration Hazard, category 1 and/or mixture viscosity > 20.5 mm²/s at 40 °C).

12. ECOLOGICAL INFORMATION

Environmental Data: No data available.

Ecotoxicological Information: No data available.

Bioaccumulation/Accumulation: No data available.

Distribution: No data available.

Aquatic Toxicity (Acute): No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Method: Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system.

Product Disposal: Empty containers retain product residue; observe all precautions for product. Decontaminate containers prior to disposal.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Technical Name : Isopropyl alcohol, Phosphoric acid

Primary Hazard Class/Division: 3

Secondary Hazard Class/Division: 8

UN/NA Number : 2924

BRO1 RUST OFF! Rust Converter

Packing Group : III

Other Shipping Information:

For products with an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Vessel (IMO/IMDG)

Shipping Name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Technical Name : Isopropyl alcohol, Phosphoric acid

UN/NA Number : 2924

Primary Hazard Class/Division: 3

Secondary Hazard Class/Division: 8

Packing Group : III

Marine Pollutant : Yes

Note: For products with an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Canadian Transportation of Dangerous Goods Regulations

Shipping Name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Technical Name : Isopropyl alcohol, Phosphoric acid

UN/NA Number : 2924

Primary Hazard Class/Division: 3

Secondary Hazard Class/Division: 8

Packing Group : III

TDG Note:

For products with an inner packaging < 5.0 L, this component may be shipped as a Limited Quantity as per TDG Section 1.17.

15. REGULATORY INFORMATION

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health Hazards: Serious Eye Damage, Skin Corrosion, Target Organ Toxicity (Single exposure)

311/312 Physical Hazards: Flammable Liquids

Fire Hazard : Yes

Sudden Release of Pressure : No

Reactive Hazard : No

Product Acute Toxicity : Yes

Product Chronic Toxicity : No

EPCRA Section 313 Toxic Chemicals

Chemical Name	Wt. %	CAS number
Isopropyl alcohol	18 - 22	67-63-0

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status:

This product contains no listed extremely hazardous substances that are subject to the reporting requirements of SARA Title III, Section 302.

BR01 RUST OFF! Rust Converter

CERCLA Hazardous Substances and Reportable Quantities (RQ)

Chemical Name	Wt. %	RQ
Phosphoric acid	23 - 27	5,000

TSCA (The Toxic Substances Control Act)

TSCA Status:

All components are included or are otherwise exempt from inclusion on this inventory.

CAA 112(b) - Hazardous Air Pollutants

CAA 112(r) - List of Substances for Accidental Release Prevention:

This product contains no chemicals subject to CAA 112(b) or CAA 112(r).

California Proposition 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

OSHA Hazard Communication Standard (29 CFR 1910.1200):

OSHA Status: Hazardous Product (See Section 2 for details).

This product has been classified in accordance with the hazard criteria of the USA OSHA Hazard Communication Standard (29CFR 1910.1200) and the Safety Data Sheet contains all the information required by the OSHA Hazard Communication Standard (HazCom 2012).

CANADA

WHMIS Hazard Symbol and Classification

See Section 2 for details.

WHMIS Regulatory Status:

This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

WHMIS Classification:

WHMIS 2015 (Canada) Status: Hazardous Product (See Section 2 for details).

CEPA - National Pollutant Release Inventory (NPRI):

Name	CAS No.	NPRI Part No.
Isopropyl alcohol	67-63-0	1A, 5 (VOC)

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL):

All components are included or are otherwise exempt from inclusion on this inventory.

Comments VOC Content -- See section 9.

16. OTHER INFORMATION

Reason for Issue: NEW

Approved By: Jim Gordon **Title:** R&D Chemist / Chemiste de R&D

Prepared By : Regulatory Compliance / Conformité réglementaire **Date Revised:** 05/31/2017

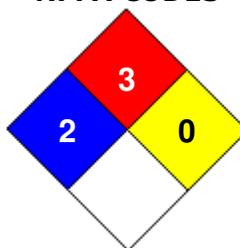
Information Contact: 905-670-5411

Revision Summary: This MSDS replaces the 03/15/2017 MSDS.

HMIS RATING

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	G

NFPA CODES



NFPA 30 / 30B Storage Classification: Flammable Liquid IC

Manufacturer Supplemental Notes: None

Data Sources: Not Available

Additional SDS Information:

- N/AV Not Available
- N/AP Not Applicable
- ND Not yet determined
- ACGIH American Conference of Governmental Industrial Hygienists
- CAA The Clean Air Act
- CCCR The Consumer Chemicals and Containers Regulations
- CEPA The Canadian Environmental Protection Act
- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- EPCRA The Emergency Planning and Community Right-To-Know Act
- IARC International Agency for Research on Cancer
- MSHA Mine Safety and Health Administration
- NIOSH National Institute for Occupational Safety and Health
- NTP National Toxicology Program
- OSHA The Occupational Safety and Health Administration
- SARA The Superfund Amendments and Reauthorization Act
- WHMIS Workplace Hazardous Materials Information System

General Statements: None

Comments: None

Manufacturer Disclaimer: The information contained herein is based on data considered accurate. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. No responsibility is assumed for personal injury or property damage to vendees or users or third parties, caused by the material. Such vendees or users assume all risks with the use of this material.