



SAFETY DATA SHEET

1. Identification

Product identifier	Rust Converter
Other means of identification	
Product Code	No. 18419 (Item# 1005248)
Recommended use	Neutralize rust and convert it to a black primer
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency	800-424-9300 (US)
(CHEMTREC)	703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Specific target organ toxicity, single exposure Category 2 (kidney, liver, reproductive system)
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	



Signal word	Warning
Hazard statement	May cause damage to organs (kidney, liver, reproductive system).
Precautionary statement	
Prevention	Do not breathe mist or vapor. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	If exposed or concerned: Call a poison center/doctor.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
water		7732-18-5	70 - 80
vinylidene dichloride acrylic copolymer latex		Proprietary	20 - 30
tannins		1401-55-4	3 - 5
2-butoxyethanol		111-76-2	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Edema. Jaundice.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	PEL	240 mg/m ³ 50 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	24 mg/m ³ 5 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Latex. Rubber gloves.

Other Wear suitable protective clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Creamy white.
Odor	Glue-like.
Odor threshold	Not available.
pH	2.5 - 3.5
Melting point/freezing point	-103 °F (-75 °C) estimated
Initial boiling point and boiling range	122 °F (50 °C) estimated
Flash point	None (Tag Closed Cup)
Evaporation rate	Slow.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.3 % estimated
Flammability limit - upper (%)	10.6 % estimated
Vapor pressure	21.1 hPa estimated
Vapor density	< 1 (air = 1)
Relative density	1.11
Solubility(ies)	
Solubility (water)	Miscible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	446 °F (230 °C) estimated
Decomposition temperature	Not available.
Percent volatile	71.8 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Heat, flames and sparks. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Aldehydes. Ketones. Organic acids. Hydrogen chloride. Phosgene.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs by inhalation. Prolonged inhalation may be harmful.
Skin contact	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Edema. Jaundice.

Information on toxicological effects

Material name: Rust Converter

No. 18419 (Item# 1005248) Version #: 02 Revision date: 11-15-2017 Issue date: 11-15-2017

SDS US

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Acute toxicity	Not known.	
Product	Species	Test Results
Rust Converter		
Acute		
Dermal		
ATEmix		2929.5026 mg/kg
Oral		
ATEmix		3326.5478 mg/kg
Components	Species	Test Results
2-butoxyethanol (CAS 111-76-2)		
Acute		
Oral		
LD50	Rat	1300 mg/kg
tannins (CAS 1401-55-4)		
Acute		
Dermal		
LD50	Rabbit	1100 mg/kg
Inhalation		
LC50	Rat	4500 mg/l
Oral		
LD50	Rat	2260 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
2-butoxyethanol (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.	
tannins (CAS 1401-55-4)	3 Not classifiable as to carcinogenicity to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Not regulated.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause damage to organs (kidney, liver, reproductive system).	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.	
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
2-butoxyethanol (CAS 111-76-2)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 1550 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) >= 1000 mg/l, 96 hours
tannins (CAS 1401-55-4)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 37 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-butoxyethanol	0.81, log Pow	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	
Not regulated.	
SARA 304 Emergency release notification	
Not regulated.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	
Not regulated.	
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance	
2-butoxyethanol (CAS 111-76-2)	
CERCLA Hazardous Substance List (40 CFR 302.4)	
2-butoxyethanol (CAS 111-76-2)	Listed.
CERCLA Hazardous Substances: Reportable quantity	
Not listed.	
Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.	
Other federal regulations	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	
Not regulated.	

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard categories Acute toxicity (any route of exposure)
Specific target organ toxicity (single or repeated exposure)

SARA 302 Extremely hazardous substance

Not listed.

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-butoxyethanol	111-76-2	1 - 3

US state regulations

US - New Jersey Community RTK (EHS Survey): Listed substance

2-butoxyethanol (CAS 111-76-2)

US. New Jersey Worker and Community Right-to-Know Act

2-butoxyethanol (CAS 111-76-2)

US. Massachusetts RTK - Substance List

2-butoxyethanol (CAS 111-76-2)

US. Pennsylvania Worker and Community Right-to-Know Law

2-butoxyethanol (CAS 111-76-2)

US. Rhode Island RTK

2-butoxyethanol (CAS 111-76-2)

California Proposition 65



WARNING: This product can expose you to chemicals including ethylene oxide: lead: cadmium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-dioxane (CAS 123-91-1)	Listed: January 1, 1988
acetaldehyde (CAS 75-07-0)	Listed: April 1, 1988
arsenic (CAS 7440-38-2)	Listed: February 27, 1987
beryllium (CAS 7440-41-7)	Listed: October 1, 1987
cadmium (CAS 7440-43-9)	Listed: October 1, 1987
cobalt (CAS 7440-48-4)	Listed: July 1, 1992
ethylene oxide (CAS 75-21-8)	Listed: July 1, 1987
lead (CAS 7439-92-1)	Listed: October 1, 1992
nickel (CAS 7440-02-0)	Listed: October 1, 1989

California Proposition 65 - CRT: Listed date/Developmental toxin

cadmium (CAS 7440-43-9)	Listed: May 1, 1997
ethylene oxide (CAS 75-21-8)	Listed: August 7, 2009
lead (CAS 7439-92-1)	Listed: February 27, 1987
lithium carbonate (CAS 554-13-2)	Listed: January 1, 1991
mercury (CAS 7439-97-6)	Listed: July 1, 1990

California Proposition 65 - CRT: Listed date/Female reproductive toxin

ethylene oxide (CAS 75-21-8)	Listed: February 27, 1987
lead (CAS 7439-92-1)	Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

cadmium (CAS 7440-43-9)	Listed: May 1, 1997
ethylene oxide (CAS 75-21-8)	Listed: August 7, 2009
lead (CAS 7439-92-1)	Listed: February 27, 1987

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2-butoxyethanol (CAS 111-76-2)

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 53.8 g/l

Architectural coatings (40 CFR 59, Subpt. D) Compliant

State

Architectural coatings This product is regulated as an Architectural Coating for Flat Coatings (interior or exterior). This product is compliant for use in all 50 states.

VOC content 53.8 g/l

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	11-15-2017
Revision date	11-15-2017
Prepared by	Allison Yoon
Version #	02
Further information	CRC # 691B/1002735
HMIS® ratings	Health: 2 Flammability: 0 Physical hazard: 1 Personal protection: B
NFPA ratings	Health: 2 Flammability: 0 Instability: 1

NFPA ratings



Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision information

Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data