



Rust Kutter

Safety Data Sheet

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Rust Kutter

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Rust Converter

1.3. Details of the supplier of the safety data sheet

Sanco Industries, Inc.
1819 S. Calhoun Street
Fort Wayne, IN 46802
Phone: 260-426-6281
Toll Free: 888-697-2626

1.4. Emergency telephone number

Emergency number : 24 Hour Contact - CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute toxicity (oral) Category 4 H302
Skin corrosion/irritation Category 1A H314

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Contains : 2-Butoxyethanol; Phosphoric acid

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash hands and other exposed areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear personal protective equipment
P301 + P312 - If swallowed: Call a poison center or doctor/physician if you feel unwell
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/shower
P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

None of the ingredients are of unknown toxicity

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable – product is a mixture

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3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Phosphoric acid	(CAS No) 7664-38-2	35 - 45	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
2-Butoxyethanol	(CAS No) 111-76-2	5 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311
Citric acid	(CAS No) 77-92-9	1 - 5	Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the product label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a poison center or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Reactivity : Thermal decomposition generates : Corrosive vapors.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Contain all water used for fire-fighting to the greatest extent possible.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe vapors. Avoid contact during pregnancy/while nursing.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-Butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
IDLH	US IDLH (ppm)	700 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	24 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
Citric acid (77-92-9)		
Not applicable		
Nonylphenol ethoxylates (9016-45-9)		
Not applicable		
Phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
IDLH	US IDLH (mg/m ³)	1000 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
NIOSH	NIOSH REL (STEL) (mg/m ³)	3 mg/m ³

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or face shield.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Pale yellow
- Odor : Mild acidic
- Odor threshold : No data available
- pH : 0.25
- Melting point : No data available

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Freezing point	: -18 °C
Boiling point	: > 93 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: Same as water
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: Same as water
Relative density	: 1.19
Relative vapor density at 20 °C	: Same as water
Solubility	: Infinite in water
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Rust Kutter	
ATE US (oral)	1972.840 mg/kg body weight
2-Butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	400 mg/kg
LC50 inhalation rat (ppm)	450 ppm/4h
ATE US (oral)	470.000 mg/kg body weight
ATE US (dermal)	400.000 mg/kg body weight
ATE US (gases)	450.000 ppmV/4h
Nonylphenol ethoxylates (9016-45-9)	
LD50 oral rat	2590 mg/kg
LD50 dermal rabbit	1780 µl/kg
ATE US (oral)	2590.000 mg/kg body weight
Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg

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Phosphoric acid (7664-38-2)	
LD50 dermal rabbit	2730 mg/kg
LC50 inhalation rat (mg/l)	> 850 mg/m ³ (Exposure time: 1 h)
ATE US (oral)	1530.000 mg/kg body weight
ATE US (dermal)	2730.000 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes severe skin burns and eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

2-Butoxyethanol (111-76-2)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Harmful if swallowed.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

2-Butoxyethanol (111-76-2)	
LC50 fish 1	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

Citric acid (77-92-9)	
LC50 fish 1	1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and degradability

Rust Kutter	
Persistence and degradability	Not established.

2-Butoxyethanol (111-76-2)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Rust Kutter	
Bioaccumulative potential	Not established.

2-Butoxyethanol (111-76-2)	
Log Pow	0.81 (at 25 °C)
Bioaccumulative potential	Not established.

Citric acid (77-92-9)	
Log Pow	-1.72 (at 20 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local, state, and federal regulations.
Ecology - waste materials	: Avoid release to the environment.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric Acid), 8, III

UN-No.(DOT) : UN3264

Proper Shipping Name (DOT) : Corrosive liquid, acidic, inorganic, n.o.s.
(Phosphoric Acid)

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP

DOT Packaging Exceptions (49 CFR 173.154) : Inner packagings not over 5.0 L (1.3 gallons) net capacity for liquids may be packaged as a limited quantity except for transportation by air.

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Rust Kutter	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
2-Butoxyethanol (111-76-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Glycol Ethers Category
Citric acid (77-92-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Nonylphenol ethoxylates (9016-45-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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Phosphoric acid (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2-Butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

Citric acid (77-92-9)

Listed on the Canadian DSL (Domestic Substances List)

Nonylphenol ethoxylates (9016-45-9)

Listed on the Canadian DSL (Domestic Substances List)

Phosphoric acid (7664-38-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

2-Butoxyethanol (111-76-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Citric acid (77-92-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Nonylphenol ethoxylates (9016-45-9)

Listed on the EU NLP (No Longer Polymers) inventory

Phosphoric acid (7664-38-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

2-Butoxyethanol (111-76-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Canadian IDL (Ingredient Disclosure List)

Citric acid (77-92-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Canadian IDL (Ingredient Disclosure List)

Nonylphenol ethoxylates (9016-45-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Pollutant Release and Transfer Register Law (PRTR Law)

Phosphoric acid (7664-38-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

No additional information available

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SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation

SDS US (GHS HazCom 2012)

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