



# Rust Kutter

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/05/2015

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Version: 3.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Rust Kutter

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Rust Converter

#### 1.3. Supplier

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

##### GHS US classification

Corrosive to metals Category 1 H290 May be corrosive to metals  
Acute toxicity (oral) Category 4 H302 Harmful if swallowed  
Skin corrosion/irritation Category 1B H314 Causes severe skin burns and eye damage

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P234 - Keep only in original container  
P260 - Do not breathe 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 protective gloves/protective clothing/eye protection  
P301+P312 - If swallowed: Call a poison center/doctor 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  
P330 - Rinse mouth  
P363 - Wash contaminated clothing before reuse  
P390 - Absorb spillage to prevent material damage  
P405 - Store locked up  
P406 - Store in corrosive resistant container with a resistant inner liner  
P501 - Dispose of contents/container in accordance with local, state, and federal regulations

#### 2.3. Other hazards which do not result in classification

No additional information available

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### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Phosphoric acid	(CAS-No.) 7664-38-2	35 – 45	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
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 hazard classes and H-statements : 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 label where possible). Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. 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. Call a physician immediately.
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. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Burns.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) 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. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe mist/vapors/spray.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. 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 : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. 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 mist/vapors/spray. Avoid contact during pregnancy/while nursing. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas thoroughly after handling. Wash contaminated clothing before reuse. Always wash hands after handling the product.

#### 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 away from : Keep container closed when not in use. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Metals.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Rust Kutter</b>	
No additional information available	
<b>2-Butoxyethanol (111-76-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH TWA (ppm)	20 ppm
<b>USA - ACGIH - Biological Exposure Indices</b>	
Biological Exposure Indices (BEI)	200 mg/g Kreatinin (Medium: urine - Time: end of shift - Parameter: Butoxyacetic acid with hydrolysis)
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	240 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	50 ppm
Limit value category (OSHA)	prevent or reduce skin absorption
<b>USA - IDLH - Occupational Exposure Limits</b>	
US IDLH (ppm)	700 ppm

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USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
NIOSH REL (TWA) (ppm)	5 ppm
US-NIOSH chemical category	Potential for dermal absorption
Citric acid (77-92-9)	
No additional information available	
Phosphoric acid (7664-38-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup>
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
NIOSH REL (STEL) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves

#### Eye protection:

Chemical goggles or face shield. Safety glasses

#### 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	: Not applicable
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
Vapor pressure	: Same as water

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Relative vapor density at 20 °C	: Same as water
Relative density	: 1.19
Solubility	: Infinite in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: 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. metals.

### 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.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

ATE US (oral)	1914.507 mg/kg body weight
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2-Butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	400 mg/kg
LC50 inhalation rat (ppm)	450 ppm/4h

Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg
LD50 dermal rabbit	2730 mg/kg
LC50 inhalation rat (mg/l)	> 850 mg/m <sup>3</sup> (Exposure time: 1 h)

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious 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	Evidence of Carcinogenicity

Reproductive toxicity	: Not classified
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Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Burns.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

##### 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])
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#### 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)

Partition coefficient n-octanol/water (Log Pow)	0.81 (at 25 °C)
Bioaccumulative potential	Not established.

##### Citric acid (77-92-9)

Partition coefficient n-octanol/water (Log Pow)	-1.72 (at 20 °C)
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#### 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. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local, state, and federal regulations.
Ecology - waste materials	: Avoid release to the environment.

### 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, II
UN-No.(DOT)	: UN3264

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Proper Shipping Name (DOT) : Corrosive liquid, acidic, inorganic, n.o.s.  
(Phosphoric Acid)  
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Packing group (DOT) : II - Medium Danger  
Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242  
DOT Symbols : G - Identifies PSN requiring a technical name  
DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.  
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.  
T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)  
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.  
TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 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.xxx) : 154  
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L  
DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.  
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"  
Emergency Response Guide (ERG) Number : 154

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Rust Kutter

SARA Section 311/312 Hazard Classes	Corrosive to metal Acute toxicity Skin corrosion or irritation
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#### Citric acid (77-92-9)

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

#### Phosphoric acid (7664-38-2)

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

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### 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)

##### 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)

##### 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)

##### 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)

##### 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)

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

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Revision date : 02/18/2021

Other information : None.

Full text of H-phrases:

H227	Combustible liquid
H290	May be corrosive to metals
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



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