

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number CP064RICMAR
Product name **SS 102 INDUSTRIAL SOLVENT**
Effective date 23-Jan-2013
Company information RICMAR INDUSTRIES
889 N LARCH AVE
ELMHURST, IL 60126 United States
Company phone General Assistance 800-323-0779
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 02
Supersedes date 13-Sep-2011

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.
Cancer hazard. Irritating to skin. Irritating to eyes. Irritating to respiratory system.
Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Inhalation. Skin contact. Ingestion.

Eyes Causes eye irritation.

Skin Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Irritating to skin.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Central nervous system. Lungs.

Chronic effects Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause delayed lung injury.

Signs and symptoms Discomfort in the chest. Narcosis. Coughing. Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Trichloroethylene	79-01-6	> 90
Carbon Dioxide	124-38-9	3 - 5
1,2-Butylene Oxide	106-88-7	0.1 - 0.5
Non-hazardous and other components below reportable levels		0.0001 - 0.1

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or Poison Control Center immediately.

Skin contact Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin.

Inhalation Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Call a physician if symptoms develop or persist.

Ingestion

Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties

NFPA Rating Fire = 2. Materials that must be moderately heated or exposed to relative high ambient temperatures before ignition can occur. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Water. Water fog. Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters**Specific hazards arising from the chemical**

Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment and precautions for firefighters

In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

6. Accidental Release Measures

Methods for containment

Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.

Methods for cleaning up

Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling

Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

Storage

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Keep out of the reach of children. Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH**

Components	CAS #	TWA	STEL	Ceiling
Trichloroethylene	79-01-6	10 ppm	25 ppm	Not established
Carbon Dioxide	124-38-9	5000 ppm	30000 ppm	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Trichloroethylene	79-01-6	100 ppm	Not established	200 ppm
Carbon Dioxide	124-38-9	5000 ppm	Not established	Not established

Personal protective equipment**Eye / face protection**

Chemical goggles are recommended.

Skin protection
Respiratory protection

Wear appropriate chemical resistant clothing. Chemical resistant gloves.
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. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance Clear.
Boiling point 186.8 °F (86.1 °C) estimated
Color Colorless.
Density 1.5159 g/cm³ estimated
Flammability (HOC) 0 kJ/g estimated
Flash back No
Flash point None
Form Aerosol.
Freezing point Not available
Odor Characteristic.
pH Not applicable
Physical state Liquid.
Pressure 110 - 130 psig @70F
Solubility Negligible
Specific gravity 1.5161 estimated

10. Chemical Stability & Reactivity Information

Chemical stability Risk of ignition. Stable at normal conditions.
Conditions to avoid Heat, flames and sparks.
Hazardous decomposition products Irritants. Toxic gas.

11. Toxicological Information

Acute effects Acute LC50: 1081 mg/l/4h estimated, Rat, Inhalation

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

1,2-Butylene Oxide	106-88-7	Inhalation LC50 Rat >6.3 mg/L 4 h; Oral LD50 Rat 500 mg/kg; Dermal LD50 Rabbit 1757 mg/kg
Trichloroethylene	79-01-6	Inhalation LC50 Rat 8000 ppm 4 h; Inhalation LC50 Rat 26300 ppm 1 h; Oral LD50 Rat 4290 mg/kg; Dermal LD50 Rabbit >20 g/kg

Sensitization Not expected to be hazardous by OSHA criteria.

Carcinogenicity Hazardous by OSHA criteria. Risk of cancer cannot be excluded with prolonged exposure. Potential cancer hazard.

IARC - Group 2A (Probably Carcinogenic to Humans)

Trichloroethylene 79-01-6 Monograph 63 [1995]; Supplement 7 [1987]

IARC - Group 2B (Possibly Carcinogenic to Humans)

1,2-Butylene Oxide 106-88-7 Monograph 71 [1999]; Monograph 47 [1989] (overall evaluation upgraded from 3 to 2B with supporting evidence from other relevant data)

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity LC50 42.33 mg/L, Fish, 96.00 Hours,
EC50 2.28 mg/L, Daphnia, 48.00 Hours,
Components of this product are hazardous to aquatic life.

13. Disposal Considerations

Waste codes D040: Waste Trichloroethylene

Disposal instructions Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container to hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Aerosols
Hazard class	2.2
UN number	UN1950
Additional information:	
Special provisions	153
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None



Further information

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IMDG

Basic shipping requirements:

Proper shipping name	AEROSOLS
Hazard class	2.2
Subsidiary hazard class	6.1
UN number	1950
Additional information:	
Packaging exceptions	NOT a LTD QTY
Item	5T
Labels required	2.2 +6.1
Transport Category	If <1L: Consumer Commodity



IATA

Basic shipping requirements:

Proper shipping name	IATA Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III (1950)
Hazard class	2.2
Subsidiary hazard class	6.1
UN number	1950
Additional information:	
Packaging exceptions	NOT a LTD QTY
Labels required	2.2, 6.1



15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

1,2-Butylene Oxide	106-88-7	0.1 % de minimis concentration
Trichloroethylene	79-01-6	0.1 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Trichloroethylene: 100.0000
1,2-Butylene Oxide: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
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
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)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - Pennsylvania - RTK (Right to Know) List

1,2-Butylene Oxide	106-88-7	Environmental hazard
Carbon Dioxide	124-38-9	Present
Trichloroethylene	79-01-6	Environmental hazard

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
 Flammability: 2
 Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated

This document has undergone significant changes and should be reviewed in its entirety.

Prepared by

Regulatory Compliance