



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 090-005
Product name **Industrial RD-90**
Effective date 10-Nov-2011
Company information Sprayway, Inc.
1005 Westgate
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 05
Supersedes date 21-Apr-2011

2. Hazards Identification

Emergency overview Aerosol. FLAMMABLE
CONTENTS UNDER PRESSURE.
Will be easily ignited by heat, spark or flames. May be harmful if absorbed through skin.
Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Inhalation. Eye contact. Skin contact. Ingestion.

Eyes Contact with eyes may cause irritation. Health injuries are not known or expected under normal use.

Skin May be harmful if absorbed through skin.

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

Ingestion Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion.

Target organs 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.

Chronic effects Blood. Central nervous system. Lungs.
Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May be harmful if absorbed through skin. 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. Cyanosis (blue tissue condition, nails, lips, and/or skin). Coughing. Jaundice.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Paraffinic, Naphthenic Solvent	64742-47-8	50 - 60
Propane	74-98-6	8 - 10
2-Butoxyethanol	111-76-2	8 - 10
Non-hazardous and other components below reportable levels		20 - 40

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. Get medical attention if irritation develops and persists.

Skin contact	Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
Inhalation	Move to fresh air. Get medical attention if symptoms persist.
Ingestion	Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. 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. Call a physician immediately.
Notes to physician	Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties	Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
Suitable extinguishing media	Water. Water spray. Water fog. Alcohol 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.

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. Use water spray to reduce vapors or divert vapor cloud drift.
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. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Do not get this material in contact with skin. Avoid prolonged exposure.
Storage	Store locked up. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep in an area equipped with sprinklers. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Level 3 Aerosol.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Not normally needed.
Skin protection	Wear appropriate chemical resistant clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer.
Respiratory protection	Wear positive pressure self-contained breathing apparatus (SCBA). If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	345.2 °F (173.9 °C) estimated
Color	Amber.
Density	0.7769 g/cm ³ estimated
Flammability (Flame Extension)	33 in
Flammability (HOC)	37.9966 kJ/g estimated
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available
Odor	Slight.
pH	Not Applicable
Physical state	Liquid.
Pressure	38 - 48 psig @ 70F
Solubility	Partially
Specific gravity	0.777 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.

11. Toxicological Information

Acute effects	Acute LD50: 1370 mg/kg estimated, Rat, Dermal Acute LC50: 5 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50**Toxicology Data - Selected LD50s and LC50s**

2-Butoxyethanol	111-76-2	Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg
Paraffinic, Naphthenic Solvent	64742-47-8	Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns. LC50 78.94 mg/L, Fish, 96.00 Hours, EC50 6228 mg/L, Daphnia, 48.00 Hours,
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13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
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Disposal instructions

Contents under pressure. Dispose of this material and its container to hazardous or special waste collection point. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001.

14. Transport Information

Department of Transportation (DOT) Requirements**Basic shipping requirements:**

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG**Basic shipping requirements:**

Proper shipping name	Aerosols
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	None

**IATA****Basic shipping requirements:**

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	2.1



15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 CERCLA/SARA Hazardous Substances - Not applicable.

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

2-Butoxyethanol	111-76-2	1.0 % de minimis concentration (applies to R-(OCH ₂ CH ₂) _n -OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)
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Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

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 - Yes
 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)	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
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

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

2-Butoxyethanol	111-76-2	Present
Paraffinic, Naphthenic Solvent	64742-47-8	Present
Propane	74-98-6	Present

16. Other Information

Further information

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

HMIS® ratings

Health: 2*
 Flammability: 4
 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

Product and Company Identification: Product and Company Identification

Prepared by

Regulatory Compliance