MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: **Spray Adhesive**

Product Number (s): **03018**

Product Use: General Purpose Aerosol Adhesive

Manufacturer / Supplier Contact Information:

In United States:
CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com
1-215-674-4300(General)
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)

In Canada:
CRC Canada Co.
2-1246 Lorimar Drive
Mississauga, Ontario L5S 1R2
www.crc-canada.ca
1-905-670-2291

In Mexico:
CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquídea
San Luís Potosí, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

DANGER: Extremely Flammable. Harmful or Fatal if Swallowed. Vapor Harmful.
Contents Under Pressure.
Appearance & Odor: White liquid, mint odor when wet

Potential Health Effects:

ACUTE EFFECTS:

EYE: Can cause sever irritation, redness, tearing, and blurred vision.

SKIN: Prolonged or repeated contact can cause moderate irritation, defatting and dermatitis.

INHALATION: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation. Possible cardiac arrhythmias at high concentrations.

INGESTION: Main hazard is aspiration into the lungs during swallowing or vomiting. Aspiration can lead to chemical pneumonitis.

CHRONIC EFFECTS: Overexposure to this material (or its component) has apparently been found to cause the following effects in laboratory animals: kidney damage, eye damage, liver damage

TARGET ORGANS: kidney, liver

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition / Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Isohexane	107-83-5	20 – 25
Dimethyl ether	115-10-6	10 – 15
Acetone	67-64-1	10 – 15
Cyclohexane	110-82-7	10 - 15
Liquefied Petroleum Gas	68476-86-8	5 – 10
1,1-Difluoroethane (HFC-152a)	75-37-6	5 – 10
Propane	74-98-6	5 – 10
n-Pentane	109-66-0	3 - 5

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting. Give two glasses of water if conscious. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Note to Physicians: Aspiration hazard. Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6))

Flash Point: - 156°F / -104°C (PMCC) Upper Explosive Limit: 18.0

Autoignition Temperature: ND Lower Explosive Limit: 1.0

Fire and Explosion Data:

Suitable Extinguishing Media: CO_2, dry chemical, foam, water fog

Products of Combustion: Hydrofluoric acid and possibly carbonyl fluoride; oxides of carbon; various hydrocarbons; oxides of sulfur

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors are heavier than air and travel along the ground or may be moved by ventilation and ignited by ignition sources at locations distant from material handling point.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Eliminate sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use near sources of ignition. Do not smoke while using this product. Use with adequate ventilation. Avoid breathing vapors. Avoid skin contact with liquid. Wash hands after using and before contacting food products. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F / 49°C to prevent cans from rupturing. Store out of reach of children.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

	OSHA		ACGIH		OTHER		
COMPONENT	TWA	STEL	TWA	STEL	TWA	SOURCE	UNIT
Isohexane	NE	NE	500	1000	NE		ppm
Dimethyl ether	NE	NE	NE	NE	NE		
Acetone	1000	NE	500	750	NE		ppm
Cyclohexane	300	NE	100	NE	NE		ppm
Liquefied Petroleum Gas	1000	NE	1000	NE	NE		ppm
1,1-Difluoroethane	NE	NE	NE	NE	1000	AIHA	ppm
Propane	1000	NE	1000	NE	NE		ppm
n-Pentane	1000	NE	600	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved

cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or rubber. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid
Color: white
Odor: mint when wet
Odor Threshold: ND
Specific Gravity: 0.7246
Initial Boiling Point: 177°F / 81°C
Freezing Point: ND
Vapor Pressure: ND
Vapor Density: > 1 (air = 1)
Evaporation Rate: fast
Solubility: negligible
Coefficient of water/oil distribution: ND
pH: NA
Volatile Organic Compounds: wt %: 63.8 g/L: 462 lbs./gal: 3.8

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Heat, sparks, welding arcs, pilot lights, static electricity, or other sources of ignition

Incompatible Materials: Oxidizing agents, acids, alkali, alkaline earth metals, amines, reducing agents

Hazardous Decomposition Products: Hydrofluoric acid and possibly carbonyl fluoride; oxides of carbon; various hydrocarbons; oxides of sulfur

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Isohexane	> 15,000 mg/kg	> 2000 mg/kg	No data
Dimethyl ether	No data	No data	309 g/m^3/4H
Acetone	5800 mg/kg	No data	50,100 mg/m^3/8H
Cyclohexane	12,705 mg/kg	> 2.0 g/kg	> 4044 ppm
Liquefied Petroleum Gas	No data	No data	No data
1,1-Difluoroethane	No data	No data	No data
Propane	No data	No data	No data
n-Pentane	> 2000 mg/kg	No data	364 g/m^3/4H

Chronic Toxicity:

Component	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen	Irritant	Sensitizer
Isohexane	No	No	No	No	Unknown
Dimethyl ether	No	No	No	eye	Unknown
Acetone	No	No	No	eye	Unknown
Cyclohexane	No	No	No	skin	Unknown
Liquefied Petroleum Gas	No	No	No	No	No
1,1 Difluoroethane	No	No	No	No	Unknown
Propane	No	No	No	No	No
n-Pentane	No	No	No	No	Unknown

Reproductive Toxicity: No information available.
Teratogenicity: No information available.
Mutagenicity: No information available.
Synergistic Effects: No information available.

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available.
Persistence / Degradability: No information available.
Bioaccumulation / Accumulation: No information available.
Mobility in Environment: No information available.

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. (See 40 CFR Part 261.20 – 261.33)
Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): UN1950, Aerosols, flammable, 2.1, Limited Quantity**

ICAO/IATA (air): UN1950, Aerosols, flammable, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions: **This product can be classified and labeled as 'Consumer Commodity, ORM-D' for domestic ground shipping until January 1, 2014.
If shipping as limited quantity by ground, note that shipping papers are not required.

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):
All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Reportable Quantities (RQ's) exist for the following ingredients: Acetone (5000 lbs), Cyclohexane (1000 lbs)

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.

Superfund Amendments Reauthorization Act (SARA) Title III:
Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:		
	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Cyclohexane (< 15%)

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration (OSHA):
This product is regulated under the Hazard Communication Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Benzene, Toluene, Acetaldehyde, Formaldehyde

Consumer Products VOC Regulations: In states with Consumer Products VOC regulations, this product is compliant as an Aerosol Adhesive.

State Right to Know:

New Jersey:	115-10-6, 67-64-1, 110-82-7, 74-98-6, 109-66-0
Pennsylvania:	115-10-6, 67-64-1, 110-82-7, 74-98-6, 109-66-0
Massachusetts:	115-10-6, 67-64-1, 110-82-7, 74-98-6, 109-66-0
Rhode Island :	115-10-6, 67-64-1, 110-82-7, 74-98-6, 109-66-0

Canadian Regulations:

Controlled Products Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, B5, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as

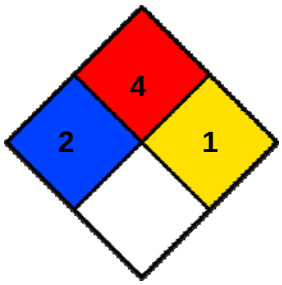
listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

Section 16: Other Information

HMIS® (II)	
Health:	**2**
Flammability:	**4**
Reactivity:	**1**
PPE:	**B**

NFPA



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 03018
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Changes since last revision: Section 3: Updated Component List
Section 14: Transport Information

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 Industries' 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 MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose
NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System