



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

Product Use: General purpose degreaser

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

WARNING: May Cause Eye and Skin Irritation. Contents Under Pressure.
As defined by OSHA's Hazard Communication Standard, this product is hazardous.
Appearance & Odor: Creamy white liquid, citrus odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause eye irritation including burning and redness. Severity of irritation will depend upon quantity and duration of exposure.

SKIN: Brief exposures are not expected to cause any health effects. Prolonged exposure may cause mild to moderate irritation. Persons with sensitive skin may experience redness or drying of the skin.

INHALATION: Inhalation of small amounts is not expected to cause negative health effects. Prolonged exposure may cause a headache or irritation to the throat.

INGESTION: Ingestion of small amounts is not expected to cause negative health effects. Ingestion of larger amounts may cause stomach ache and irritation of the gastrointestinal tract.

CHRONIC EFFECTS: None known

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: eye and skin conditions

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

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

Section 3: Composition/ Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Water	7732-18-5	60 - 70
d-Limonene	8028-48-6	5 - 10
Methyl ester, soybean oil	67784-80-9	5 - 10
Ethoxylated tallow amine	61791-26-2	1 - 3
1,1-Difluoroethane (HFC-152a)	75-37-6	10 - 20

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: Give victim 1 - 2 glasses of water. Do NOT induce vomiting. If health effects are experienced, contact a physician.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

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

Flash Point: None

Upper Explosive Limit: None

Autoignition Temperature: None

Lower Explosive Limit: None

Fire and Explosion Data:

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Products of Combustion: Oxides of carbon, may form acrid fumes

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

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.

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)**Product Number (s): 14440**

Methods for Containment & Clean-up: 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 mix this product with other household chemicals. Avoid contact with eyes and skin. Wash hands after use and before consuming food. 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 to prevent cans from rupturing. Store out of reach of children.

Aerosol Storage Level: I

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Water	NE	NE	NE	NE	NE		
d-Limonene	NE	NE	NE	NE	NE		
Methyl ester, soybean oil	NE	NE	NE	NE	NE		
Ethoxylated tallow amine	NE	NE	NE	NE	NE		
1,1-Difluoroethane	NE	NE	NE	NE	1000	AIHA	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 rubber or nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

Physical State: liquid

Color: creamy white

Odor: citrus

Odor Threshold: ND

Specific Gravity: 0.97

Initial Boiling Point: 212°F / 100°C

Freezing Point: ND

Vapor Pressure: < 2 mmHg @ 20°C

Vapor Density: ND (air = 1)

Evaporation Rate: slow

Solubility: soluble in water

Coefficient of water/oil distribution: ND

pH: 10.0

Volatile Organic Compounds: wt %: 9.8 g/L: 95.0 lbs./gal: 0.79

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: None

Incompatible Materials: Strong oxidizers, strong acids

Hazardous Decomposition Products: Oxides of orange terpenes

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)
Water	> 90 mL/kg	No data	No data
d-Limonene	4400 mg/kg	> 5 g/kg	No data
Methyl ester, soybean oil	> 5000 mg/kg	> 2000 mg/kg	No data
Ethoxylated tallow amine	620 mg/kg	No data	No data
1,1-Difluoroethane	No data	No data	25 ppm/30M

Chronic Toxicity:

Component	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen	Irritant	Sensitizer
Water	No	No	No	No	No
d-Limonene	No	No	No	E & S (severe) / R (mild)	Unknown
Methyl ester, soybean oil	No	No	No	E, S & R (mild)	Yes
Ethoxylated tallow amine	No	No	No	E & S (severe)	Unknown
1,1-Difluoroethane	No	No	No	No	Unknown

E – Eye S – Skin R – Respiratory

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

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: Over 96% of the product ingredients are biodegradable.

Bioaccumulation / Accumulation: No information available

Mobility in Environment: No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is not a RCRA hazardous waste. Pressurized containers may be a D003 reactive waste. (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): Consumer Commodity, ORM-D

ICAO/IATA (air): Consumer Commodity, ID8000, 9

IMO/IMDG (water): Aerosols, UN1950, 2.2, Limited Quantity

Special Provisions: None

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: None

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

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

Section 311/312 Hazard Categories:	Fire Hazard	No
	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:
None

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

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: None

Consumer Products VOC Regulations: In states with consumer products VOC regulations, this product is compliant as a General Purpose Degreaser.

State Right to Know:

New Jersey: 75-37-6
Pennsylvania: None
Massachusetts: 75-37-6
Rhode Island : None

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, 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.

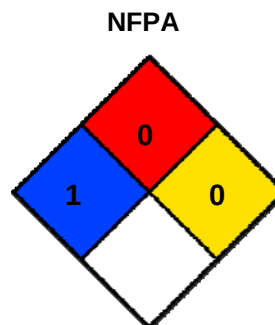
Additional Regulatory Information: None

Product Name: HydroForce® Super Citrus™ Heavy Duty Degreaser (aerosol)

Product Number (s): 14440

Section 16: Other Information

HMIS® (II)	
Health:	1
Flammability:	0
Reactivity:	0
PPE:	B



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

Prepared By: Michelle Rudnick

CRC #: 667C

Revision Date: 05/26/2010

Changes since last revision: Formula change to reduce VOC content

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