Revision Date: 9/19/2012

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 152HF 152HF HALIDE FREE FLUX

Florida Cirtech Inc. Company Phone Number: 970-346-

1309 N. 17th. Ave. 8002

Greeley, CO 80631 Website: www.floridacirtech.com

USA

Emergency Phone Number: 800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Signal Word: WARNING Hazard Type: Flammable

Physical State: Liquid
Color: Clear
Odor: Alcohol

Likely Exposure Routes: Eyes, Ingestion, Inhalation, Skin

Exposure Effects

Inhalation: May cause physical discomfort to the respiratory tract.

Eyes: Causes severe irritation (tears, blurred vision and redness) May result in

permanent eye damage.

Ingestion: May cause nausea and vomitting. May cause irritation to the mouth, throat and

stomach.

Skin: Prolonged contact may cause mild skin irritation.

Target Organs: Not Determined

Potential Carcinogens as listed by OSHA,

IARC, or NTP:

NONE

Other Possible Health Effects: See Section 11 for more information.

Potential Environmental Effects: Not considered to be harmful to aquatic life.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Weight Percentage	
Isopropanol	67-63-0	50-70%	
Ethanolamine	141-43-5	<5%	

SECTION 4: FIRST AID MEASURES

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Eyes: Immediately flush with water for at least 15 minutes or until the chemical is removed.

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It conscious, rinse mouth with water. Seek medical advice on whether to induce vomiting. Never give Ingestion:

anything by mouth to an unconscious person. Get medical attention.

Skin: Wash off immediately with soap and water. If clothing is contaminated, remove and launder before reuse.

Special Instructions

for physicians:

Follow usual and customary procedures

SECTION 5: FIRE FIGHTING MEASURES

Fire fighting measures: Standard procedure for chemical fires.

Vapors and fumes may be irritating and toxic. Firefighters should wear self-contained breathing apparatus Fire fighter protection:

and full fire-fighting turnout gear.

Suitable extinguishing

media:

Carbon dioxide, dry chemical, foam or water spray.

Unsuitable extinguishing

media:

Not applicable

As with any chemical fire, combustion products of unknown toxicity are always possible.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8.

If possible, stop further leakage of the material. Contain spilled material by diking with non-flammable Containment methods:

diking materials.

Clean-Up methods: Absorb spilled liquid in a suitable material. Sweep or vacuum material into disposal containers.

Environmental

This material does not present a substantial contamination threat to the environment. precautions:

Spill reporting requirements:

Handling:

Spills of this material do not need to be reported to the National Response Center.

SECTION 7: HANDLING AND STORAGE

Keep away from heat, sparks and flame. Use grounding when transferring this material to prevent static discharge. Avoid eye, skin, and clothing contact. Do not inhale mist or

vapors. Do not taste or swallow. Use only with adequate ventilation.

Storage: Keep container closed when not in use. Avoid elevated and freezing temperatures.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	OSHA		ACGIH	
Material Name	TWA	STEL	TWA	STEL
Isopropanol	400 ppm	NE	400 ppm	500 ppm
Ethanolamine	3 ppm	6 ppm	3 ppm	6 ppm

Discard contaminated gloves after use. Have eye-wash facilities in the immediate vicinity. Work in General Hygiene Considerations:

adequately ventilated area. Do not breathe vapors or mist. Minimize any contact with any chemical.

Respiratory Protection: No special respiratory equipment is needed. Eye/Face Protection: Wear safety glasses when handling this material.

Skin Protection: Wear nitrile or latex gloves. Wear protective clothing.

Engineering Controls: Work in well ventilated areas. Do not breathe vapors or mist.

Other Protective Equipment: Eye wash station and safety shower should be available in immediate work area. Select additional

protective equipment based upon potential for exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Clear VOC Percentage: 80% Physical State: Liquid Evaporation Rate: N/A

Odor: Alcohol Odor Threshold: Not Determined Melting Point: Not Determined Coeff. Water/Oil Dist.: Not Determined

Boiling Point: 190 F Lower Explosive Limit: NE Specific Gravity: .93 Upper Explosive Limit: NE

pH: 6-8 Flash Point: Not Established

Vapor Pressure: Not Determined Solubility: Complete

Vapor Density: Not Determined

SECTION 10: STABILITY AND REACTIVITY

Stability Stable

Conditions to Avoid: Heat, sparks, open flames

Incompatable Materials: Strong Oxidizers

Hazardous decomposition products: Carbon Dioxide, Carbon Monoxide and HCl gas.

Possibility of hazardous reactions: None expected.

SECTION 11: TOXICOLOGY INFORMATION

ACUTE EFFECTS

Dermal Toxicity LD50: the main component(s)

Oral Toxicity LD50: None of the components of this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

Inhalation Toxicity: Mildly irritating.

Eye Irritation: Severely irritating. Skin Irritation: Not Determined

Sensitization:

CHRONIC EFFECTS

Carcinogenicity: Not Determined Mutagenicity: Not Determined

Reproductive Effects:

Teratogenicity:

Synergistic Products: NONE

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not determined

Persistence/Degradability: Degradation is expected under aerobic and anaerobic conditions.

Bioaccumulation/Accumulation: the main component(s)

Mobility in Environment: Appreciable volitilization is expected from water to air.

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a RCRA Hazardous Waste?

D001

Dispose of in accordance with federal, state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

US D.O.T. and Canadian TDG (ground)

Proper Shipping Description:

FLAMMABLE LIQUIDS, n.o.s. (ISOPROPANOL, ETHANOLAMINE), 3, UN1993, PG II

ICAO (air)

Proper Shipping Description: See US D.O.T.

IMDG (water)

Proper Shipping Description: See US D.O.T.

SECTION 15: REGULATORY INFORMATION

FEDERAL REGULATORY INFORMATION

All components are listed in the EPA Toxic Substances Control Act (TSCA) Chemical Substance

Title III SARA Section 302

Product contains materials subject to reporting under SARA Section 302?

CERCLA

Product contains materials subject to reporting under CERCLA (40 CFR302.4)? NO

Title III SARA Section 313

Product contains materials subject to reporting under SARA Section 313?

Resource Conservation and Recovery Act (RCRA)

Product is a hazardous waste under RCRA (40 CFR 261.20)? D001

STATE REGULATORY INFORMATION

California Proposition 65

Product contains materials that are carcinogenic and/or can cause reproductive harm and is subject to warning NO and discharge requirements under the "Safe Water and Toxic Enforcement Act of 1986":

WHMIS Canadian Workplace Hazardous Material Information System

WHMIS Classification B2

SECTION 16: OTHER INFORMATION

NFPA 704: National Fire Protection Association

Health: 2 Fire: 3 Reactivity: 0

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

IMO International Maritime Organization

EmS Code: F-E, S-E

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