ITW CHEMTRONICS® **MSDS #0504**

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Company Address:
8125 Cobb Center Drive
Kennesaw, GA 30152

Product Information: 800-TECH-401 Emergency: (Chemtrec) 800-424-9300
Customer Service: 800-645-5244 Revision Date: January 8, 2010

Product Identification

ULTRAJET® DUSTER SYSTEM

Product Code: ES1020K (NSN 6850-01-381-2675), ES1020R (NSN 6850-01-434-1191), ES1020KC, ES1020RC

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. % Range
Tetrafluoroethane	811-97-2	100%

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Clear, colorless liquefied gas. This product is nonflammable. Exposure to liquid may cause frostbite.
Eyes: Contact with liquid is irritating and may cause frostbite.
Skin: Contact causes frostbite; prolonged contact can cause skin irritation.
Ingestion: Unlikely due to volatile nature of product. Contact with liquid may cause frostbite to mouth and throat tissues.
Inhalation: Harmful if inhaled. High concentrations of vapors in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.
Pre-Existing Medical Conditions Aggravated by Exposure: Heart, lung, skin, eye.

SECTION 4: FIRST AID MEASURES

Eyes: Treat for possible frostbite, then flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.
Skin: Treat for possible frostbite, then wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persist. Wash clothing separately before reuse.
Ingestion: Treat for possible frostbite. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting. Get immediate medical attention.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None to boiling (TCC) LEL/UEL: Nonflammable
Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Large Spills: Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.
Small Spills: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container for proper disposal.

SECTION 7: HANDLING AND STORAGE

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor or mist. Do not reuse this container. Store in a cool dry place away from heat, sparks and flame. Keep container closed when not in use. Do not store in direct sunlight.
KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	OTHER (DUPONT) AEL
Tetrafluoroethane	NA	NA	1,000 ppm

AEL = Acceptable Exposure Limit

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	0	0
Reactivity	1	1
Personal Protection	-	B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, colorless liquefied gas
Odor: Slight ethereal odor
pH: NA
Vapor Pressure: 4730 mmHg @ 77°F
Vapor Density: 3.18 @ 77F
(Air = 1)
Solubility in Water: 67mg/1 @ 77F
Specific Gravity: (Water =1) 1.21
Evaporation Rate: >1
(Butyl acetate=1)
Percent Volatile: 100%
Boiling Point: -15.7F (-27C)

SECTION 10: STABILITY AND REACTIVITY

Stability - This product is stable. Conditions to Avoid: Do not spray near open flames, red hot surfaces or other sources of ignition.
Incompatibility: Do not mix with powdered alkali and alkaline earth metals or strong oxidizing agents.
Products of Decomposition: Thermal decomposition may release hydrofluoric acid vapor.
Hazardous Polymerization: Will not occur
Conditions to Avoid: NA

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation:

Tetrafluoroethane	Rats ALC	567,000ppm/4hrs

Information from Dupont.
Cancer Information: No ingredients listed as human carcinogens by NTP or IARC
Reproductive effects: none Teratogenic effects: none Mutagenic effects: none

SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Information

Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

REPORTING

US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is:**1-800-424-8802**

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

SECTION 14: TRANSPORTATION INFORMATION

	Proper Shipping Name	UN Number	Hazard Class	Sub. Risk	Pkg. Group	Hazard Label	Pkg. Instr.	Max. Quantity
Air:	1,1,1,2-Tetrafluoroethane	UN 3159	2.2	NA	NA	Nonflammable Gas	200	75kg;150kg
Ground:	Consumer Commodity ORM-D	NA	ORM-D	NA	NA	ORM-D	173.306 DOT-E-10232	

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION
This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).
This information should be included on all MSDSs copied and distributed for this material.
TOXIC SUBSTANCES CONTROL ACT (TSCA).
All ingredients of this product are listed on the TSCA Inventory.
WHMIS: Class A; Class D2B
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

Product is a Level 1 aerosol. Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.

March 7, 2011

U.S. Department
of Transportation

East Building, PHH – 30
1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 10232
(FIFTEENTH REVISION)

EXPIRATION DATE: March 31, 2014

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: ITW Sexton
Cambridge, MA

2. PURPOSE AND LIMITATIONS:

a. This special permit authorizes the manufacture, marking, sale, and use of a non-DOT specification packaging conforming in part with the DOT Specification 2Q, except as specified herein, for the transportation in commerce of the material authorized in this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.

b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.304(d) and 173.306(a)(3) in that non-DOT specification cylinders are not authorized, except as specified herein.

5. BASIS: This special permit is based on the application of ITW Sexton dated April 1, 2010, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Refrigerant gases, n.o.s.	2.2	UN1078	N/A
1,1,1,2-Tetrafluoroethane	2.2	UN3159	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-refillable non-DOT specification inside metal container conforming with Sexton Can Company drawing No. 995D0017, Revision G, dated November 26, 2007, on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The cylinder must be in conformance with DOT Specification 2Q (§ 178.33a), except as follows:

§ 178.33a-6 Manufacture.

(a) * * *

(b) * * *

(1) * * *

(2) Side seams. Not permitted.

(c) Ends: The ends shall be designed to withstand pressure and bottom end is fitted with a pressure relief device (PRD).

§ 178.33a-8 Tests.

Burst Test - For qualification burst tests, each 5000 containers or less, successively produced as a batch or part thereof shall constitute a lot. Two containers, one with a PRD and one without a PRD, taken randomly from each lot and complete with the ends assembled must be pressure tested to destruction. The burst pressure of containers fitted with a bottom PRD may not be below 250 psig. The burst pressure of containers without a bottom PRD may not be less than 370 psig. If either of the test container fails to meet the

above requirements, the lot shall be rejected. However, an additional 5 randomly selected pairs of containers from that lot may be burst tested to qualify that lot. If any of the additional test containers fail the burst test, that lot must be rejected.

§ 178.33a-9 Marking.

Applies except that the container must be marked with "DOT-SP 10232" in lieu of "DOT 2Q".

b. OPERATIONAL CONTROLS - Each packaging must be prepared and shipped in accordance with the following:

(1) The filling density may not exceed 87 percent.

(2) Prior to initial shipment of the filled containers, each completed container must be heated until the pressure in the container is equivalent to the equilibrium pressure of the lading at 130°F. Lading equilibrium pressure may not exceed 200 psig at 130°F. Liquid content of lading may not completely fill the container at 130°F. Acceptable containers must show no evidence of leakage, distortion or other defect.

(3) The container must be packed in a strong outside packaging as prescribed in § 173.301(a)(9).

(4) Each outside packaging must be marked "INSIDE CONTAINERS COMPLY WITH DOT-SP 10232".

(5) Containers filled with a material meeting the definition of a "consumer commodity" in § 171.8 may be reclassed as an ORM-D and shipped as "consumer commodity" in accordance with § 173.306(i). These outside packagings are not required to be marked "INSIDE CONTAINERS COMPLY WITH DOT-SP 10232" as specified above in paragraph 7(c)(4).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. Test data obtained under the qualification burst test (§ 178.33a-8) of this special permit, must be kept on file and be made available upon request by OHMSPA.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper shall furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
- Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BMOORE/sln