



January 2015

## 1. Identification

Name of the product: **MICRODUSTER III REFILL**  
 Product Identification Number(s): CT2512, CT2513  
 Recommended use: No-residue spray duster  
 Use not recommended: Any use contacting skin or subject to inhaling large amount of fumes.  
 Company: **Advantus Corporation** Telephone: 904-482-0091  
**12276 San Jose Blvd., Ste. 618** Fax number: 904-482-0099  
**Jacksonville, FL 32223** Emergency: 1-800-327-1237  
 CHEMTREC (Transportation): 1-800-424-9300

CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR. This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA). It is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

## 2. Hazard(s) identification

### Emergency Overview

### GHS Classification

OSHA Hazards per 29 CFR 1910: OSHA HCS  
 Gases under pressure (Compressed gas), H280 Gas under pressure. May explode if heated.  
 Other hazards which do not result in classification are: None  
 GHS Label elements, including precautionary statements  
 Pictogram:



Signal word: Warning

### Hazard statements:

H280 Contains gas under pressure; may explode if heated.

### Precautionary statements:

P410 Protect from sunlight. Store in a well-ventilated place.  
 Hazards not otherwise classified (HNOC) or not covered by GHS - Asphyxiant

## 3. Composition / Information on ingredients

Chemical identity: 1, 1, 1, 2-Tetrafluoroethane 100%  
 Common name: HFC 134a Chemical formula: C<sub>2</sub>H<sub>2</sub>F<sub>4</sub>  
 Numbers of identity: CAS: 811-97-2 EINECS. 212-377-0  
 Impurities: None known.

## 4. First-aid measures

P304+313 +341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a physician.  
 P302+352 IF ON SKIN: Wash with soap and water. Check for frost bite.  
 P305+351+338 IF IN EYES: Rinse continuously with water for several minutes.  
 Remove contact lenses if present and easy to do; continue rinsing.  
 P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 Most important symptoms and effects, both acute and delayed: Severe eye irritation. Skin irritation.

## 5. Firefighting measures

**Suitable extinguishing equipment:**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Emergency procedures:**

Eliminate ignition source. Evacuate unnecessary personnel. Call appropriate fire fighting crew.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting.

Hazardous decomposition products formed under fire conditions. - Carbon oxides, hydrogen fluoride

Use water spray to cool unopened containers.

## 6. Accidental release measures

Use personal protective equipment. Avoid breathing, mist or vapors. Ensure adequate ventilation.

Product is not flammable.

Environmental precautions:

Prevent further leakage if safe to do so.

Methods and materials for containment and cleaning up:

Not relevant as product is a gas at room temperature.

See also Sec. 13.

## 7. Handling and storage

**Precautions for safe handling:**

Avoid contact with skin and eyes. Avoid inhalation of vapors or mist.

Contents under pressure.

**Conditions for safe storage:**

Keep container tightly closed in a dry and well-ventilated place.

Containers which have been opened must be resealed and kept upright to prevent leakage.

## 8. Exposure controls / personal protection

Information on the system design:

Product is intended for external use only. Stay up wind, out of any spray developed.

Exposure Limits:

Reference 29CFR 1910.1000 Table Z-1 or

Component Name, CAS#

USA. Workplace Environmental Exposure Levels (WEEL)

1,1,1,2-Tetrafluoroethane 811-97-2

TWA 1,000 ppm

**Personal protective equipment**

Product is a gas which is heavier than air. Avoid breathing vapors.

Protect skin from cold discharge.

**Hygiene measures**

Wash hands and face before breaks and immediately after handling the product.

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Appearance: Compressed gas.

Odor: no data available

Odor threshold: no data available

pH-value: no data available

Melting/ freezing point: -108 °C (-162 °F) lit.

Initial boiling point: -26.5 °C (-15.7 °F) - lit. boiling range

Flash point: no data available

Evaporation rate: no data available

Flammability (solid, gas): Not flammable.

Explosion limits: no data available

Vapor pressure: (highest partial vapor pressure) at 20°C: Not available

Vapor density: Heavier than air.

Relative density (water=1.00): 1.21 g/cm<sup>3</sup> at 25 °C (77 °F) - Auto-ignition temperature: Not available

Solubility: no data available

Decomposition temperature: Not available

Partition coefficient: Log Kow = no data available

Viscosity: no data available

## 10. Stability and reactivity

Chemical stability: Stable under recommended storage conditions.  
Possibility of hazardous reactions: No data.  
Conditions to avoid: No data.  
Materials to avoid: No data.  
Hazardous decomposition products: See Section 5 for action by fire.

## 11. Toxicological information

**Routes of Entry:** Inhalation.

Oral Toxicity LD 50: No data available for gas.  
Dermal Toxicity LD 50: No data available for gas.  
Inhalation Toxicity, Vapor, LC50 rat - 4 h - 1,500,000 mg/m<sup>3</sup>  
Eye Irritation (Rabbit) No data.  
Dermal Irritation (Rabbit) No data.  
Chronic Effects on Humans: No data

This product does not contain a substance at a concentration exceeding OSHA thresholds that has been listed as a carcinogen or potential carcinogen published by NTP, IARC or OSHA.

Reproductive toxicity no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

May be harmful., Prolonged or repeated exposure to skin causes defatting and dermatitis.

Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence

## 12. Ecological information

Ecotoxicity:

Toxicity to fish semi-static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 450 mg/l - 96 h

Toxicity to daphnia and static test EC50 - *Daphnia magna* (Water flea) - 980 mg/l - 48 h

Other adverse effects no data available

## 13. Disposal considerations

Offer surplus and non-recyclable solutions to a licensed disposal company.

Dispose in accordance with local, state and federal regulations.

## 14. Transport information

DOT (US)

UN number: 3159 Class: 2.2

Proper shipping name: 1,1,1,2-Tetrafluoroethane

Reportable Quantity (RQ): None

Marine pollutant: No

Poison Inhalation Hazard: No

May also be classed as a Consumer Commodity

## 15. Regulatory information

SARA 302: None subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: None that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Sudden Release of Pressure Hazard, Chronic Health Hazard

Right To Know Components:

1,1,1,2-Tetrafluoroethane PA, NJ

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# Safety Data Sheet

## 16. Other information

SDS Preparation date:		November 13, 2014.		SDS Code:		AC CT2510	
Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference 49 CFR 171.8,		
Immediate	No	No	Yes	No	OSHA 29 CFR 1910.1200 and		
Delayed	No	No	XXX	XXX	SARA 302/311/312/313.		
HMIS Hazard ratings: Health 1 Fire 0 Instability 0 Other B (Goggles, gloves)							
Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4							

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Note: The information in this SDS was obtained from current reputable and competent sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.