

EXHIBIT S115 TO DECLARATION OF
STEPHEN G. SCHWARZ IN SUPPORT OF
PLAINTIFFS' MOTION FOR CLASS
CERTIFICATION

Material Safety Data Sheet

Industrial Chemical Products Division



3M Center
St. Paul, Minnesota 55144-1000
612/733-1110 Duns No.: 00-617-3082

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Trade Name
FC-143 FLUORAD Brand Fluorochemical Surfactant

Chemical Family Anionic Fluorochemical Surfactant	3M I.D. Number 98-0211-0367-0 (5 lb. unit)
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1. Ingredients	CAS #	%	Exposure Limits
Ammonium Perfluoroalkyl Carboxylates	Mixture#	100	0.1 mg/m ³ (3)

= Not Hazardous per 29 CFR 1910.1200

Exposure limit data source: 1) ACGIH Threshold Limit Values, 2) Federal OSHA Permissible Exposure Limit, 3) 3M Exposure Guidelines, 4) Chemical Manufacturer Recommended Guidelines and 5) None established.

2. Physical Data

Boiling Point	NA	Solubility in Water	Appreciable
Vapor Pressure	NA	Specific Gravity (H ₂ O = 1) (Bulk)	0.4-0.5
Vapor Density (Air = 1)	NA	Percent Volatile	NA
Evaporation Rate	NA	pH (0.5% Aqueous)	~5

Appearance and Odor

Light colored powder; slight odor.

3. Fire and Explosion Hazard Data

Flash Point (Test Method) Non-Flammable	Flammable Limits: LEL = NA	UEL = NA
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Extinguishing Media
Water, Foam, CO₂, Dry Chemical

Special Fire Fighting Procedures
None Known

Unusual Fire and Explosion Hazards
Heat of fire may release ammonia and HF.

4. Environmental Information

Spill Response
Observe precautions from other sections. Use toxic dust mask. Use wet sweeping compound, or wet down with water to avoid dusting. Collect spilled material. Place in a closed container.

Recommended Disposal
Mix with flammable material and incinerate in an industrial or commercial facility. Combustion products will include HF. Disposal alternative: Dispose of waste product in a facility permitted to accept chemical wastes. Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste No.: None

Environmental Data
Chemical Oxygen Demand (COD): Nil; 20-Day Biochemical Oxygen Demand (BOD₂₀): Nil; 96-Hr. LC₅₀, Bluegill Sunfish (*Lepomis macrochirus*): >500 mg/L; 96-Hr. LC₅₀, Fathead Minnow (*Pimephales promelas*): >700 mg/L.

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5. Health Hazard Data

Eye Contact

FC-143 can be irritating to the eyes upon direct contact. Animal studies indicate FC-143 is moderately irritating ocularly.

Skin Contact

FC-143 may be absorbed through the skin. Slightly toxic dermally. Care should be taken to avoid skin contact. FC-143 is non-irritating dermally.

Inhalation

FC-143 may cause respiratory irritation upon inhalation of the dust. Care should be taken to avoid dust inhalation.

Ingestion

FC-143 is moderately toxic on an acute oral basis. The acute oral LD50 (rat) is 540 mg/kg. FC-143 is not teratogenic (rats or rabbits). Non-mutagenic in the Ames Assay.

Suggested First Aid

EYE CONTACT: Immediately flush with plenty of water. Continue for 10 minutes. Call a physician.
SKIN CONTACT: Wash affected area with soap and water.
INHALATION: Remove to fresh air.
INGESTION: Give two glasses of water. Call a physician or Poison Control Center.

6. Reactivity Data

Stability	Unstable	<input checked="" type="checkbox"/> Stable
	Conditions To Avoid Not Applicable	
Incompatibility	Materials To Avoid Not Applicable	
Hazardous Polymerization	May Occur	<input checked="" type="checkbox"/> Will Not Occur
	Conditions To Avoid Not Applicable	

Hazardous Decomposition Products

Thermal decomposition may produce toxic materials including HF.

7. Special Protection Information

Eye Protection Safety Goggles	Skin Protection Rubber gloves, protective clothing.
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Ventilation
Local exhaust ventilation should be used to control airborne dust.

Respiratory and Special Protection
Toxic dust or supplied air respirator if dust is not well controlled.

8. Precautionary Information

Avoid eye contact and breathing of dust. Prevent moisture contamination to keep powder free flowing. Do not take internally. Wash hands thoroughly before eating food. Launder clothing before re-use. Avoid skin contact.

The information on this Data Sheet represents our current data and best opinion as to the proper use and handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any process is the responsibility of the user. NA = Not Applicable ND = Not Determined