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Material Safety Data Sheet

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1 Product Identification

Trade name: FC-722 FLUORAD(TM) BRAND FLUOROCHEMICAL COATING (INACTIVE)
Product ID: 98-0211-5542-3, 98-0211-5543-1, ZF-0002-1034-2, 98-0211-8894-5, 98-0211-8914-1
Intended Use of Product: Coating
Division: M SPECIALTY MATERIALS

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
PERFLUORO COMPOUNDS (PRIMARILY	86508-42-1	98.0 COMPOUNDS WITH 6 CARBONS)
FLUOROALIPHATIC COPOLYMER	Trade Secret	2.0

NOTE: FLUOROALIPHATIC COPOLYMER is a Trade Secret material.

3 Hazards Identification

Critical Hazards: None known.

See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact: Immediately flush eyes with large amounts of water. Get immediate medical attention.

Instructions for Skin Contact: Flush skin with large amounts of water. If irritation persists, get medical attention.

Instructions for Inhalation: If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

Instructions for Ingestion: Drink two glasses of water. Call a physician.

5 Fire Fighting Measures

Flash point: None (Seta flash CC)

Lower Explosive Limit (%): Not applicable

Upper Explosive Limit (%): Not applicable

Auto ignition temperature: Not applicable

Suitable Extinguishing Media: Carbon Dioxide; Dry chemical; Foam;

Exposure Hazards during Fire: No data available.

Combustion Products from Fire: None known.

Fire Fighting Procedures: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

6 Accidental Release Measures

Personal Precautions:

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill.

Spill Response:

Ventilate the area with fresh air. Contain spill. Cover with absorbent material. Collect as much of the spilled material as possible. Clean up residue. Place in a closed container approved for transportation by appropriate authorities.

Methods for Disposal:

Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. Combustion products will include HF. Facility must be capable of handling halogenated materials.

7 Handling and Storage

Storage Requirements: Store at room temperature. Keep container closed when not in use.

Incompatible Materials: None known.

Ventilation: No data available.

Fire Prevention: Not applicable.

Explosion Prevention: Non-flammable: ordinary combustible material.

Use Instructions: No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of the hazardous decomposition products mentioned in section 10 of this MSDS.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection: Avoid eye contact. Indirect vented goggles

Skin Protection: Avoid skin contact.

Respiratory Protection: Avoid breathing of airborne material. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: half-mask organic vapour respirator with dust/mist prefilter;

Ingestion (Prevention): Not applicable.

Recommended Ventilation: Use with appropriate local exhaust ventilation.

Ingredient Exposure Data

PERFLUORO COMPOUNDS (PRIMARILY COMPOUNDS WITH 6 CARBONS) (86508-42-1)

Specific Ingredient Data:: No data available.

LD50 (rat, oral):: No data available.

LC50 (rat, inhalation/4 hours): No data available.

Inventory Certifications: AICS - Australian Inventory of Chemical Substances

CICS - Chinese Inventory of Chemical Substances

DSL - Domestic Substances List (Canada)

KE-28146 KECI - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Commercial Chemical Substances

TSCA - Toxic Substances Control Act (USA)

Exposure Limits:: No data available.

FLUOROALIPHATIC COPOLYMER (Trade Secret)

Specific Ingredient Data: No data available.

LD50 (rat, oral):: No data available.

LC50 (rat, inhalation/4 hours):: No data available.

Exposure Limits:: No data available.

9 Physical and Chemical Properties

Physical form, Color, Odour:	Liquid; colourless; mild odour;
Odour Threshold:	No data available.
pH:	Not applicable
Boiling point/boiling range:	56 C
Melting point/melting range:	Not applicable
Vapour pressure:	Approximately 232 mmHg at 20 C
Water Solubility:	Nil
Partition coefficient (K _{o/w}):	No data available.

Specific gravity:	Approximately 1.7 Water=1
Vapour density:	Approximately 12 Air=1 at 20 C
Volatile organic compounds:	Not applicable
Evaporation rate:	> 1.0 BuOAc=1
Viscosity:	Unknown

10 Stability and Reactivity

Conditions to Avoid: None known.

Materials to Avoid: Finely divided active metals, alkali and alkaline earth metals.

Hazardous Decomposition: Carbon monoxide and carbon dioxide; hydrogen fluoride; Perfluoroisobutylene (PFIB); Toxic vapours, gases or particulates;

Stability and Reactivity: Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Effects from Skin Contact:

No adverse health effects are expected from skin contact. Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

Effects from Inhalation: Vapours from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Effects from Ingestion: Ingestion is not a likely route of exposure to this product. Swallowing a relatively large amount of this material is unlikely to produce serious illness or death.

Sensitization Information: No data available.

Carcinogenicity: No data available.

Mutagenicity: No data available.

Reproductive Effects: No data available.

Component Based Information: No data available.

Product Based Information: No data available.

Other Effects & Information: A Product Toxicity Summary Sheet is available.

12 Ecological Information

Environmental Data: Persistence/Biodegradability:

This compound is completely fluorinated (perfluorinated), or it contains perfluorinated portions. Perfluoroalkyl groups resist degradation in most natural environments.

Ecotoxicity Data: This low-solubility substance has insignificant toxicity to aquatic organisms (Lowest LL50 or EL50 is >1000 mg/L). LL50 (Lethal Level) and EL50 are similar to LC50 and EC50, but tests the water phase from incompletely miscible mixtures. This substance has insignificant toxicity to waste water treatment system organisms (sludge respiration IC50 > 1000 mg/L).

Ecofate Data: Other Effects and Information:

ENVIRONMENTAL FATE AND EFFECTS:

This substance did not degrade significantly in a ready biodegradation test. This compound is completely fluorinated (perfluorinated), or it contains perfluorinated portions.

Perfluoroalkyl groups resist degradation in most natural environments.

This low-solubility substance has minimal toxicity to aquatic organisms (Lowest LL50 or EL50 > 1000 mg/L). LL50 (Lethal Level) and EL50 (Effective Level) are similar to LC50 and EC50, but tests the water phase from incompletely-miscible mixtures. Bioassays have been run on organisms from less than three phyla. Organisms from taxa that were not tested may show greater sensitivity.

This substance has insignificant toxicity on wastewater treatment system organisms (sludge respiration IC50 > 1000 mg/L).

AQUATIC TOXICITY:

96 hour LC50, Fathead minnow (*Pimephales promelas*): > 1000 mg/l

48 hour EC50, (Water flea (*Daphnia magna*)): > 100 % by volume

Microtox (*Photobacterium phosphoreum*) 30-min EC50: > 100 % by volume

Activated Sludge Respiration Inhibition Test (OECD Method 209): > 1000 mg/l

13 Disposal Considerations

Product as Sold: No data available.

Product Packaging: No data available.

Special Instructions: Since regulations vary, consult applicable regulations or authorities before disposal.

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification: Non-Regulated Material

15 Regulatory Information

WHMIS Classification: Not Controlled

NOTE:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

PICCS - Philippines Inventory of Commercial Chemical Substances

CICS - Chinese Inventory of Chemical Substances

TSCA - Toxic Substances Control Act (USA)

AICS - Australian Inventory of Chemical Substances

MITI - Ministry of International Trade and Industry (JAPAN)

EINECS - European Inventory of Existing Commercial Chemical Substances

DSL - Domestic Substances List (Canada)

16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:

Update Tradename (Obsolete product)

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