SAFETY DATA SHEET

SECTION 1 - Identification:

PRODUCT NAME: Fluo 300SM

SDS NUMBER: FLUO 300SM

MANUFACTURER'S NAME: Micro Powders
ADDRESS: 580 White Plains Road
Tarrytown, NY 10591

CHEMTREC PHONE: 800-424-9300
INFORMATION PHONE: 914-793-4058

SDS DATE: 2/20/2025
PREPARED BY: EH&S Group

INTENDED USE: Wax additive

SECTION 2 - Hazard identification:

CLASSIFICATION:

OSHA 29CFR 1910.1200
Not a hazardous substance or mixture

REGULATION (EC) No 1272/2008
Not a hazardous substance or mixture

LABEL ELEMENTS:

OSHA 29CFR 1910.1200
Not a hazardous substance or mixture

REGULATION (EC) No 1272/2008
Not a hazardous substance or mixture

SECTION 3 - Composition/information on ingredients:

PTFE CAS # 9002-84-0

SECTION 4 - First-aid measures:

IF IN EYES: Immediately flush with copious amounts of water for at least 20 minutes.

IF ON SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water.

IF INHALED: Treat as a nuisance dust. Remove victim to fresh air and provide oxygen if breathing is difficult. Immediate medical attention not normally required. No delayed effects expected.

IF INGESTED: Do not induce vomiting; aspiration hazard. Dilute with 1-2 glasses of water. Get medical aid. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

SECTION 5 - Fire-fighting measures:

OSHA FLAMMABILITY CLASS: Nonhazardous

Extinguishing media
Suitable extinguishing media
- Water
- powder
- Foam
- Dry chemical
- Carbon dioxide (CO_2)

Unsuitable extinguishing media - none.

Special hazards arising from the substance or mixture
- The product is not flammable.
- Not explosive

HAZARDOUS DECOMPOSITION PRODUCTS AND/OR BY PRODUCTS:
These products may emit hydrogen fluoride, tetrafluoroethylene > 800° F, hexafluoropropylene > 825° F, perfluoroisobutylene > 885° F, carbonyl fluoride > 930° F.

Chronic exposure may be fatal. Exposure to fumes that are generated during processing of polytetrafluoroethylene can cause an influenza-like condition which is sometimes called "polymer fume fever" are chills, fever, chest pains, shortness of breath and coughing. These symptoms do not necessarily occur at the time of exposure, but may require several hours to develop. The symptoms usually pass in 48 to 72 hours. The inhalation of smoke from tobacco that is contaminated with fluoropolymers can cause polymer fume fever.

Advice for firefighters
- Wear self-contained breathing apparatus and protective suit.
- When intervention in close proximity wear acid resistant over suit.
- Evacuate personnel to safe areas.
- Approach from upwind.
- Protect intervention team with a water spray as they approach the fire.
- Keep containers and surroundings cool with water spray.
- Keep product and empty container away from heat and sources of ignition.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flash point Not Applicable. Melts in proximity to fires, causing slippery floors and stairs.

SECTION 6 - Accidental release measures:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear recommended personal protective equipment. Remove ignition sources. Sweep up with a minimum of dusting. Keep away from heat or flame. Collect in containers (e.g. fiberboard drums or cartons). If hot liquid, attempt to confine spill and let the polymer solidify. Once solid, it may be recovered as the powder. Report major leaks and spills to the appropriate local, state and federal government agencies.

See the Regulatory Information (Section 15) regarding reporting requirements.

SECTION 7 - Handling and storage:

Precautions for safe handling
- This product may contain small amounts of residual Hydrogen Fluoride that can be released during handling or use.
- Container may be opened only in a well-ventilated area.
- Avoid inhalation of vapor or mist.
- Avoid dust formation.
- Ensure adequate ventilation.
- Use personal protective equipment.
- Do not contaminate tobacco products.
- Keep away from heat and sources of ignition.
- To avoid thermal decomposition, do not overheat.
- Take measures to prevent the buildup of electrostatic charge.
- Clean and dry piping circuits and equipment before any operations.
- Ensure all equipment is electrically grounded before beginning transfer operations.

Conditions for storage, including incompatibilities
Storage
- Keep in properly labeled containers.
- Store under ambient conditions.
- Keep in a well-ventilated place.
- Keep away from heat and sources of ignition.
- Keep away from combustible material.
- Keep away from Incompatible products.
- Provide tight electrical equipment well protected against corrosion.
- Refer to protective measures listed in sections 7 and 8.
- For additional information, consult the current edition of Guide for the Safe Handling of Fluoropolymers published by Plastics Europe, Association of Plastics Manufacturers.

Packaging material
Suitable material
- All materials.
- Plastic material
- Fiberboard
- Container with PE inner bag

SECTION 8 - Exposure controls/personal protection:

Control parameters - Exposure Limit Values

Particles not otherwise specified (PNOS)
- US. ACGIH Threshold Limit Values 2007
time weighted average = 3 mg/m3
Remarks: Respirable particles.
- US. ACGIH Threshold Limit Values 2010
time weighted average = 10 mg/m3
Remarks: Inhalable particles.
Remarks: Threshold limit values of by-products from thermal decomposition

Hydrogen fluoride anhydrous
- UK. EH40 Workplace Exposure Limits (WELs) 2007
time weighted average = 1.8 ppm
time weighted average = 1.5 mg/m3

Remarks: as F
- UK. EH40 Workplace Exposure Limits (WELs) 2007
Short term exposure limit = 3 ppm
Short term exposure limit = 2.5 mg/m3
Remarks: as F
- US. ACGIH Threshold Limit Values 12 2010
time weighted average = 0.5 ppm
Remarks: as F
- US. ACGIH Threshold Limit Values 12 2010
Ceiling Limit Value = 2 ppm
Remarks: as F
- EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 12 2009
time weighted average = 1.8 ppm
time weighted average = 1.5 mg/m3
Remarks: Indicative
- EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 12 2009
Short term exposure limit = 3 ppm
Short term exposure limit = 2.5 mg/m3
Remarks: Indicative
- US. ACGIH Threshold Limit Values 12 2010
Remarks: as F, Can be absorbed through skin.

Carbonyl difluoride
- US. ACGIH Threshold Limit Values 2009
time weighted average = 2 ppm
- US. ACGIH Threshold Limit Values 2009
Short term exposure limit = 5 ppm
- UK. EH40 Workplace Exposure Limits (WELs) 2007
time weighted average = 2.5 mg/m3
Remarks: as F
- EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 12 2009
time weighted average = 2.5 mg/m3
Remarks: Indicative

Tetrafluoroethene
- US. ACGIH Threshold Limit Values 2009
time weighted average = 2 ppm

Hexafluoropropene
- US. ACGIH Threshold Limit Values 2009
time weighted average = 0.1 ppm

Perfluoroisobutene
- US. ACGIH Threshold Limit Values 2009
Ceiling Limit Value = 0.01 ppm

Exposure controls
Appropriate engineering controls
- Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.
- In case of high-temperature processing
- Provide local ventilation appropriate to the product decomposition risk (see section 10).
- Refer to protective measures listed in sections 7 and 8.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures
Respiratory protection
- No personal respiratory protective equipment normally required.

- In case of dust clouds/fog/fumes, dust mask type P2.
- Use respirator when performing operations involving potential exposure to vapor of the product.
- Use only respiratory protection that conforms to international/ national standards.

Hand protection
- Rubber gloves
- When handling hot material, use heat resistant gloves.
- Protective gloves, if risk of decomposition:
- Wear neoprene gloves to prevent contact with hydrofluoric acid.
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection
- Tightly fitting safety goggles

Skin and body protection
- Long sleeved clothing
- Safety shoes

Hygiene measures
- Ensure that eyewash stations and safety showers are close to the workstation location.
- When using, do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
- Dispose of rinse water in accordance with local and national regulations.

SECTION 9 - Physical and chemical properties:

Appearance	: White powder
Odor	: Essentially odorless
Odor threshold	: Not applicable
Melting point	: >316 °C
Boiling point	: Not applicable
Flash point	: Not Applicable COC
Evaporation rate	: Not applicable
Flammability	: Non-flammable solid
Upper/lower flammability limits	: 450°F TOC
Vapor pressure	: Not applicable
Vapor density	: Heavier than air
Relative density	: 2.2 g/cc
Solubility	: Not applicable
Partition coefficient	: Unknown
Auto-ignition temperature	: Unknown
Decomposition temperature	: Unknown
Explosive properties	: Not applicable
Oxidizing properties	: Not applicable
Volatiles (weight percent)	: Zero

SECTION 10 - Stability and reactivity:

Reactivity - No dangerous reaction known under conditions of normal use.

Chemical stability - Stable under recommended storage conditions.

Possibility of hazardous reactions - No dangerous reaction known under conditions of normal use.

Conditions to avoid
- To avoid thermal decomposition, do not overheat.
- Keep away from flames and sparks.

Incompatible materials
- Combustible material, Flammable materials, Alkali metals (molten form), Fluorine under pressure

Hazardous decomposition products
- Gaseous hydrogen fluoride (HF)., Fluorophosgene
- tetrafluoroethylene, Hexafluoropropene, Perfluoroisobutene
- Other hazardous decomposition products may be formed.

SECTION 11 - Toxicological information:

Acute toxicity
Acute oral toxicity
- LD50, > 5,000 mg/kg

Acute inhalation toxicity
- LC50, 30 min, 3.5 mg/l, pyrolysis products (625°C)
- LC50, 5 min, 2.7 mg/l, pyrolysis products (800°C)

Acute dermal toxicity - no data available

Respiratory or skin sensitization - no data available

Mutagenicity - no data available

Carcinogenicity - IARC Group 3: Not classifiable as a human carcinogen.

Toxicity for reproduction - 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

Other information
- The product is biologically inert.
- Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.
- Product dust may be irritating to eyes, skin and respiratory system.
- The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.
- This product may contain trace level of residual tetrafluoroethylene (TFE) monomer that can be released during processing.
- Exposures to TFE can occur in handling newly opened drums and in situations where processing temperatures exceed manufacturer's recommendations.
- Avoid breathing fumes and gases produced in processing or burning of fluoropolymer containing parts. To minimize exposures to trace levels of TFE, follow the handling instructions in Section 8 of the MSDS.

SECTION 12 - Ecological information:

Toxicity - no data available

Persistence and degradability
Abiotic degradation - Result: no data available

Biodegradation - no data available

Bioaccumulative potential - no data available

Mobility - no data available

PBT and vPvB assessment - no data available

Other adverse effects - Ecological injuries are not known or expected under normal use.

SECTION 13 - Disposal considerations:

WASTE DISPOSAL METHOD: Assume conformity with applicable disposal regulations. Preferred method of disposal is in closed containers of sufficient strength to eliminate leakage at approved incineration or chemical landfill waste disposal site in accordance with local regulations.

Sewage disposal is discouraged.

RCRA: Is the unused product a RCRA hazardous waste if discarded? No.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

SECTION 14 - Transport information:

UN Number	: Not classified as hazardous.
UN Proper shipping name	: N/A
Transport hazard class	: Not classified as hazardous.
Packing group	: N/A
IATA	: Not classified as hazardous
Environmental hazards	: Not considered marine pollutant.
	: Not considered environmentally hazardous.
Special precautions	: Keep sealed and secure. Do not expose to heat.
DOT Classification	: Non-Hazardous.
INCO Terms	: EXW for Regulatory Purposes and Responsibilities

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SECTION 15 - Regulatory information:

Please request our Regulatory Summary Sheet (RSS) for global regulatory information.

REACH: All substances registered.

REACH (EU) 2017/1000, (EU) 2019/1021, and Stockholm Convention (POP): Conforms

Toxic Substances Control Act (TSCA): This product or its components are listed on the TSCA Inventory. This product and/or its components do not contain any chemicals subject to any rules or orders under TSCA sections 4, 5, 6, 7, or 8(d).

SARA Section 311/312:

- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: No
- Reactivity Hazard: No
- Sudden Release of Pressure Hazard: No

SARA Section 302: Contains an extremely hazardous substance: No
SARA Section 313: This product does not contain any toxic chemical listed under Sec.313 of the Emergency Planning and Community Right-To-Know Act of 1986.

US. EPA CERCLA Hazardous Substances (40 CFR 302) - not regulated.

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5) - not regulated.

CLEAN WATER ACT - Priority Pollutants: Contains no known priority pollutants at concentrations greater than 0.1%.

SECTION 16 - Other information:

This SDS conforms to OSHA HCS/HazCom 2012 (29 CFR Parts 1910, 1915, 1926)

This SDS conforms to Regulation (EC) No. 1907/2006 as amended by Regulation (EU) 2020/878

Micro Powders Quality Assurance Program certified to ISO 9001

The following document is available on request from Micro Powders:

Generation and Control of Static Electricity in Coatings Operations (American Coatings Association; Nov 2022)

This SDS supersedes all previously published documents dated prior to 2/20/2025.

SDS: B **FLUO 300SM**: B

THE DATA SET FORTH IN THIS SDS ARE TYPICAL VALUES (NOT SPECIFICATIONS) BASED ON INFORMATION PROVIDED BY THE SUPPLIERS OF THE RAW MATERIALS AND CHEMICALS USED IN THE MANUFACTURE OF THE AFOREMENTIONED PRODUCT. MICRO POWDERS MAKES NO WARRANTY WITH RESPECT TO THE ACCURACY OF THE INFORMATION PROVIDED BY THEIR SUPPLIERS AND DISCLAIMS ALL LIABILITY OF RELIANCE THEREOF. MICRO POWDERS WARRANTS ONLY THAT ITS PRODUCTS CONFORM TO THEIR PUBLISHED SPECIFICATIONS AND NO OTHER EXPRESS WARRANTY IS MADE WITH REGARD THERETO. WE DO NOT GUARANTEE FAVORABLE RESULTS AND WE ASSUME NO LIABILITY IN CONNECTION WITH THE USE OF THESE PRODUCTS. THEY ARE ALL INTENDED FOR USE BY PERSONS HAVING TECHNICAL SKILL AND KNOWLEDGE, AT THEIR OWN DISCRETION AND RISK.