MapleSolutions
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MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Brand Name:	**MS-GUARD WR3005**
Feature and Application:	Water & Oil Repellent for Textiles
Chemical Family:	Fluoroalkyl acrylate copolymer emulsion

National Fire Protection Association (NFPA) Ratings

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

PREPARER
Company identification
Maple Solutions
3019 Lake Road
Dollard Des Ormeaux, QC
H9B 2R3 Canada
514-472-0094

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS	Wt%	OSHA(PEL)	ACGIH (TLV)
HAZARDOUS INGREDIENTS				
Acetic Acid	64-19-7	<0.2	10 ppm	10 ppm
NON-HAZARDOUS INGREDIENTS				
Water	7732-18-5	62.4	None	None
Fluoralkyl Acrylate Copolymer	Trade Secret	30.0	None	None
Emulsifiers	Trade Secret	None	None	
Tripropylene Glycol	24800-44-0	7.4	None	None

(Note: See Section 8 of this MSDS for Exposure Guidelines)

3. HAZARDS IDENTIFICATION

PHYSICAL DESCRIPTION: Milky-white to light-yellow emulsion
ODOR: Sweetish Odor

POTENTIAL HEALTH EFFECTS: This product may cause eye, skin, and respiratory irritation. May be harmful if swallowed. Above 200ºC, hydrogen fluoride and other toxic fluorinated compounds may be produced; inhalation of these compounds under these conditions may result in serious lung irritation.

4. FIRST AID MEASURES

INGESTION: Consult a physician immediately.
EYE CONTACT: Flush with large amounts of water for 10-15 minutes. Consult a physician if needed.
SKIN CONTACT: Wash affected area with soap and water.
INHALATION: Leave the contaminated area and seek fresh air. If breathing is difficult, contact a physician.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED): Non-flammable
FLAMMABLE LIMITS: LEL: None UEL: None
HAZARDOUS COMBUSTION PRODUCTS: Toxic by-products including hydrofluoric acid, perfluoroisobutylene and carbonyl fluoride may be formed at very high temperatures
EXTINGUISHING MEDIA: Alcohol foam, CO_2, dry chemical or water spray
PROTECTIVE EQUIPMENT: Use NIOSH/MSHA approved SCBA and hunker gear. Evolution of acidic gases may require complete washdown of protective clothing prior to removal.

6. ACCIDENTAL RELEASE MEASURES

Ensure cleanup is done only by trained personnel wearing appropriate personal protective equipment. Ventilate area and cover with absorbent material.
Collect spilled material in a container and seal.
Spilled material is a slipping hazard.

7. HANDLING AND STORAGE

HANDLING

Use only in well ventilated areas.

Safety showers & eyewashes should be available in the work area.
Avoid contact with the skin or eyes.
Do not breathe vapor or spary.

STORAGE

Store material at -5ºC (23ºF) to 30ºC (86ºF).
Keep away from heat, steam, and sunlight.
Keep containers tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:	Use respirator suitable for protection when spraying this material. If material is heated above 200 ºC, use a positive pressure air supplied respirator or SCBA.
EYE PROTECTION:	Safety glasses with sideshields or goggles
PROTECTIVE CLOTHING:	Chemical resistant gloves
VENTILATION:	If material is heated above 200 ºC, use a local exhaust ventilation.
OTHER PROTECTIVE EQUIPMENT:	Eyewash station and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C)..... Approx. 100°C (Water)
FREEZING POINT (°C) ……. .....-5 °C
SPECIFIC GRAVITY (H_2O=1) .....Approx. 1.14 at 25°C
VAPOR PRESSURE……No Data
VAPOR DENSITY……No Data
EVAPORATION RATE (Butyl acetate=1)… .No Data
SOLUBILITY IN WATER .....Miscible
pH.....2 to 3

10. STABILITY AND REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID:	Excessive heat
HAZARDOUS POLYMERIZATION:	Should not occur

INCOMPATIBILITIES: May react with metals, such as sodium, magnesium, aluminum at elevate temperatures (above 425ºC); may react upon prolonged exposure to fluorine or in oxygen-fluorine mixtures at high temperatures and pressures. Contact with incompatible materials may result in fire or explosion. Hazardous decomposition or by-products and toxic by-products including hydrofluoric acid, perfluoroisobutylene, and carbonyl fluoride may be formed at very high temperatures.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS OF EXPOXURE

Ingestion:	Not Evaluated
Eye Contact:	May cause eye irritation
Skin Contact:	May cause skin irritation
Inhalation:	May cause respiratory irritation

CHORNIC EFFECTS OF EXPOSURE: No data available

CARCINOGENICITY: None of the components in this material is listed by NTP, OSHA or IARC.

OTHER POTENTIAL HAZARDS (OF THE PURE MATERIALS)

Fluorocarbon polymer:	Negative (Ames Assay)
Acute toxicity:	Oral LD50 > 2000mg/kg (rat)
Primary irritant effect:	On the skin – No irritating effect
	On the eye – No irritating effect
Sensitization:	No sensitizing effects known
Tripropylene glycol:	Oral rat LD50 of 3000 mg/kg
Acetic Acid:	Human inhalation TCLO of 816 ppm/3M
	Mouse LC50 of 5620 ppm/1H
	Rat LCLO of 16,000 ppm/4H
	Rat oral LD50 of 3530 mg/kg
	Rabbit LDLO of 1200 mg/kg
	Rabbit skin test, LD50 of 1060 mg/kg

Excessive exposure to thermal degradation products could result in delayed pulmonary edema in some cases, and on very high exposure, damage to the liver and kidneys. These substances may include: perfluoroisobutylene (TLV = 1 ppb), carbonyl fluoride (TLV = 2 ppm TWA, 5 ppm STEL), hydrogen fluoride (TLV = 3 ppm, Ceiling).

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY: The product is difficult to biodegrade.

Fish toxicity: 96 hr LC50 370 mg/L (rainbow trout)

BOD = 24,400 mgO/l
COD = 117,000 mgO/l
TOC = 15.0 W/V %
AOX = 40,000 mg/l
VOC = 7.9 %

Free Formalin = 560 ppm
Total Phosphours = 3.2 mg/L
Total Nitrogen = 1900 mg/kg

BIOACCUMULATION: Water hazard class 1 (German Regulation). Self-assessment: slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or swage system.

13. DISPOSAL CONSIDERATIONS

Comply with Federal, State and Local regulations concerning health and environment when disposing of materials. Regulations may also apply to empty containers, liners, or rinsate. DO NOT INCINERATE unless incinerator is capable of scrubbing hydrogen fluoride and other acidic combustion products.

14. TRANSPORTATION INFORMATION

UN CLASSIFICATION:	Not applicable
DOT HAZARD DESCRIPTION:	Not applicable
CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG):	Not applicable

15. REGULATORY INFORMATION

TSCA: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory. Fluoroalkyl acrylate copolymer of TG-571 is registered on TSCA Confidential Inventory (EPA # 174993).

OTHER: States such as Pennsylvania, New Jersey, California, Vermont, Massachusetts, and Rhode Island may have specific requirements or components of this product listed; consult specific state regulatory requirements for additional information.

16. OTHER INFORMATION

For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIG) documentation of TLV's (Threshold Limit Values) for individual components. Fluoropolymers Safe Handling Guide published by The Society of the Plastics Industry, and the DOT Emergency Response Guidebook.