

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

Date last revised: January 21, 2010 Date printed: January 21, 2010

SECTION 1. ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 1100-2-88

NAME: PERFORMANCE FLUID, PF-5080

(THIS IS A REGISTERED BRAND OF THE 3M COMPANY)

SECTION 2. ---- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: 86508-42-1

MF: MIXTURE OF PERFLUORO COMPOUNDS C5 THROUGH C18

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

IRRITANT.

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

SECTION 4. ----- FIRST-AID MEASURES-----

ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE

ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

DERMAL EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

EYE EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

EXTINGUISHING MEDIA

SUITABLE: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM.

FIREFIGHTING

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

EXPOSURE HAZARD(S)

MATERIAL: IRRITANT.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER, AND HOLD FOR WASTE DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. ----- HANDLING AND STORAGE-----

HANDLING

USER EXPOSURE: DO NOT BREATHE VAPOR. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. STORAGE

SUITABLE: KEEP TIGHTLY CLOSED. STORE IN A COOL DRY PLACE.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. PERSONAL PROTECTIVE EOUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. HAND: RUBBER GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE AND ODOR COLORLESS LIQUID PHYSICAL PROPERTIES

BOILING POINT: 97 °C

VAPOR PRESSURE: $\sim 45.7 \text{ mmHg}$ SPECIFIC GRAVITY: $\sim 1.7 \text{ g/cm}^3 @ 25 ^\circ\text{C}$

VAPOR DENSITY: 15.10 @ 25 °C (CALC. – AIR = 1)

SECTION 10. -----STABILITY AND REACTIVITY -----

STABILITY

STABLE: STABLE.

MATERIALS TO AVOID: FINELY DIVIDED EARTH METALS, ALKALI AND ALKALINE EARTH METALS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE, AND MAY PRODUCE TRACES OF PERFLUOROISOBUTENE (PFIB). HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES MINOR SKIN IRRITATION.

MULTIPLE ROUTES: VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES, AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL BY

INHALATION, INGESTION, OR SKIN ABSORPTION.

SIGNS AND SYMPTOMS OF EXPOSURE

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

DOT

UNRESTRICTED

SECTION 15. ----- REGULATORY INFORMATION -----

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: Xi

INDICATION OF DANGER: IRRITANT.

R: 36/37/38

RISK STATEMENTS: IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S: 26-36

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: IRRITANT.

RISK STATEMENTS: IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

UNITED STATES REGULATORY INFORMATION

TSCA INVENTORY ITEM: YES. THIS MATERIAL IS FOR INDUSTRIAL USE ONLY. NOT INTENDED FOR USE AS A MEDICAL DEVICE OR DRUG.

SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.