

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 6198-3-10

NAME: NAFION ® PFSA, 10% AQUEOUS DISPERSION

SYNONYM: PERFLUOROSULFONIC ACID/TFE COPOLYMER, AQUEOUS DISPERSION

"NAFION" IS A REGISTERED TRADEMARK OF DUPONT

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

MATERIAL	CAS	<u>%</u>
PERFLUOROSULFONIC ACID/TFE COPOLYMER	[31175-20-9]	10-12
WATER	[7732-18-5]	87-90
MIXED ETHERS AND OTHER VOCs		<1
1-PROPANOL	[71-23-8]	
ETHANOL	[64-17-5]	

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

LABEL PRECAUTIONARY STATEMENTS IRRITANT

MILD SKIN IRRITANT AND A MILD EYE IRRITANT

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

INHALATION

NO SPECIFIC INTERVENTION IS INDICATED AS THE COMPOUND IS NOT LIKELY TO BE HAZARDOUS BY INHALATION. CONSULT A PHYSICIAN IF NECESSARY. IF EXPOSED TO FUMES FROM OVERHEATING OR COMBUSTION, MOVE TO FRESH AIR. CONSULT A PHYSICIAN IF SYMPTOMS PERSIST.

SKIN CONTACT

THE COMPOUND IS NOT LIKELY TO BE HAZARDOUS BY SKIN CONTACT BUT CLEANSING THE SKIN AFTER USE IS ADVISABLE.

EYE CONTACT

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.

INGESTION

NO SPECIFIC INTERVENTION IS INDICATED AS COMPOUND IS NOT LIKELY TO BE HAZARDOUS BY INGESTION. CONSULT A PHYSICIAN IF NECESSARY.

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

FLAMMABLE PROPERTIES

HAZARDOUS GASES/VAPORS PRODUCED IN FIRE ARE CARBONYL FLUORIDE, HYDROGEN FLUORIDE (HF), ACID FLUORIDES, AND, OXIDES OF SULFUR. EXTINGUISHING MEDIA

WATER, FOAM, DRY CHEMICAL, CO₂.

FIRE FIGHTING INSTRUCTIONS

WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA) AND FULL PROTECTIVE EQUIPMENT. HYDROGEN FLUORIDE FUMES EMITTED DURING A FIRE CAN REACT WITH WATER TO FORM HYDROFLUORIC ACID. WEAR NEOPRENE GLOVES WHEN HANDLING REFUSE FROM FIRE.

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

SAFEGUARDS (PERSONNEL)

NOTE: REVIEW FIRE FIGHTING MEASURES AND HANDLING (PERSONNEL) SECTIONS BEFORE PROCEEDING WITH CLEAN-UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN-UP.

INITIAL CONTAINMENT

DIKE SPILL WITH EARTH OR SAND.

SPILL CLEAN UP

RECOVER UNDAMAGED AND MINIMALLY CONTAMINATED MATERIAL FOR REUSE AND RECLAMATION. SOAK UP WITH SAND, OIL DRY, OR OTHER NONCOMBUSTIBLE ABSORBENT MATERIALS.

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

HANDLING (PERSONNEL)

AVOID CONTACT WITH EYES, SKIN OR CLOTHING.

STORAGE

STORE IN A COOL, DRY PLACE. STORE AWAY FROM FLAMMABLE MATERIALS.

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

ENGINEERING CONTROLS

USE ONLY WITH ADEQUATE VENTILATION.

KEEP CONTAINER TIGHTLY CLOSED.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION

WEAR SAFETY GLASSES OR COVERALL CHEMICAL SPLASH GOGGLES.

RESPIRATORS

WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURES IN EXCESS OF APPLICABLE LIMITS, WEAR NIOSH APPROVED RESPIRATORY PROTECTION.

PROTECTIVE CLOTHING

WHERE THERE IS POTENTIAL FOR SKIN CONTACT HAVE AVAILABLE AND WEAR AS APPROPRIATE IMPERVIOUS GLOVES, APRON, PANTS, AND JACKET.

EXPOSURE GUIDELINES

APPLICABLE EXPOSURE LIMITS

1-PROPANOL

PEL (OSHA): 200 ppm, 500 mg/m³, 8 Hr. TWA

TLV (ACGIH): 100 ppm, 8 Hr. TWA, A4

ETHANOL

PEL (OSHA): 1,000 ppm, 1,900 mg/m³, 8 Hr. TWA TLV (ACGIH): 1,000 ppm, 1,880 mg/m³, 8 Hr. TWA, A4

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

APPEARANCE AND ODOR

CLEAR TO OPAQUE LIQUID

PHYSICAL PROPERTIES

% VOLATILES: 88-90

SOLUBILITY IN WATER: COMPLETE

pH: 1-3

SPECIFIC GRAVITY: 1.05-1.07

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

CHEMICAL STABILITY

STABLE AT NORMAL TEMPERATURES AND STORAGE CONDITIONS.

INCOMPATIBILITY WITH OTHER MATERIALS

INCOMPATIBLE OR CAN REACT WITH COMMON METALS: STEEL.

CONTACT WITH INCOMPATIBLES CAN CAUSE DANGEROUS PRESSURE BUILD-UP IN CONTAINER.

HAZARDOUS GASES OR VAPORS CAN BE RELEASED, INCLUDING FLAMMABLE HYDROGEN GAS (H2).

DECOMPOSITION

HAZARDOUS DECOMPOSITION PRODUCTS - HYDROGEN FLUORIDE, CARBONYL FLUORIDE, TOXIC FLUORO-ORGANIC COMPOUNDS.

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

ROUTE OF EXPOSURE

SKIN CONTACT: MAY CAUSE SKIN IRRITATION.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

EYE CONTACT: CAUSES EYE IRRITATION.

INHALATION: MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT. HARMFUL IF INHALED. INGESTION: MAY BE HARMFUL IF SWALLOWED.

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 -----

WASTE DISPOSAL

PREFERRED OPTIONS FOR DISPOSAL ARE: (1) SEPARATE SOLIDS FROM LIQUID BY PRECIPITATION AND DECANTING OR FILTERING. DISPOSE OF DRY SOLIDS IN A LANDFILL THAT IS PERMITTED, LICENSED OR REGISTERED BY A STATE TO MANAGE INDUSTRIAL SOLID WASTE. DISCHARGE LIQUID FILTRATE TO A WASTEWATER TREATMENT SYSTEM. (2) INCINERATE ONLY IF INCINERATOR IS CAPABLE OF SCRUBBING OUT HYDROGEN FLUORIDE AND OTHER ACIDIC COMBUSTION PRODUCTS. TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE/PROVINCIAL, AND LOCAL REGULATIONS.

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

DOT

UNRESTRICTED

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

U.S. FEDERAL REGULATIONS

TSCA INVENTORY STATUS: IN COMPLIANCE WITH TSCA INVENTORY REQUIREMENTS FOR COMMERCIAL PURPOSES.

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.