Material Safety Data Sheet – Glass Plus Mos2 Filled – PTFE Products

SECTION 1 – MANUFACTURERS INFORMATION

MANUFACTURER'S NAME	:	HINDUSTAN NYLONS
PHYSICAL ADDRESS	:	PLOT NO.C-23, MIDC Industrial Area, Miraj Block, Miraj – 416 410 (Maharashtra)
PHONE NUMBER	:	0091-233-2644468, 2644868, 2645772
FASCIMILE NUMBER	:	0091-233-2644772
E-MAIL ID	:	contact@h-n.co.in; ceo@h-n.co.in
EMERGENCY PHONE NUMBER	:	0091-9373054560, 9373056560

SECTION 2 - PRODUCT IDENTIFICATION

PRODUCT NAME	:	Glass Plus MoS2 Filled PTFE Products
SYNONYMS	:	-
CHEMICAL FAMILY	:	Fluorocarbon Polymer
MAJOR APPLICATIONS	:	Sealing

SECTION 3 - INGREDIENTS INFORMATION

COMPONENTS	CAS NUMBER	%AGE BY WEIGHT	CHEMICAL FORMULA
Polytetrafluoroethylene	9002-84-0	65 – 80%	~C_2F_4~
Glass Fiber	65997-17-3	5 – 25%	SiO_2
Molybdenum Sulfide	1317-33-5	0 – 10%	MoS_2
Graphite	7782-42-5	0 – 5%	C
Zinc Sulfide	1314-98-3	0 – 3%	ZnS

SECTION 4 - HAZARDOUS INGREDIENTS

COMPONENTS	CAS NUMBER	%AGE BY WEIGHT	CHEMICAL FORMULA
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SECTION 5 - PHYSICAL DATA

GENERAL PHYSICAL FORM	:	Solid
BOILING POINT	:	Not applicable
MELTING POINT	:	320-340 deg C
SPECIFIC GRAVITY (H_2O=1)	:	2.1 – 2.3 at 25 deg C
EVAPORATION RATE (Butyl acetate=1)	:	Not applicable
SOLUBILITY IN WATER	:	Negligible
APPEARANCE / COLOUR	:	Medium Grey
ODOR	:	no odor

SECTION 6 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT, METHOD	:	530-550 deg C, ASTM D1929
SELF IGNITION TEMPERATURE, METHOD	:	520-560 deg C, ASTM D1929
LIMITING OXYGEN INDEX/ METHOD	:	>95, ASTM D 2863
EXTINGUISHING MEDIA	:	Water, foam, dry chemical, CO_2, as appropriate for surrounding fire
SPECIAL FIRE FIGHTING PROCEDURES	:	Wear self-contained breathing apparatus. Wear full protective equipment.
UNUSUAL FIRE AND EXPLOSION HAZARDS	:	Products will emit toxic fumes at high temperature

Does not burn without an external flame. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear neoprene gloves when handling refuse from a fire involving PTFE (Polytetrafluoroethylene).
Difficult to ignite, and flame goes out when initiating source is removed. Limited flame spread and low smoke generation. Complies with definition of "limited combustible "material. High self-ignition and auto-ignition temperatures (ASTM D1929).
Hazardous gases/vapors produced in a fire are hydrogen fluoride (HF), carbon monoxide, and potentially toxic fluorinated compounds.

SECTION 7 - HEALTH HAZARD DATA

ACUTE EFFECTS OF EXPOSURE

INGESTION	:	Harmless
EYE CONTACT	:	May cause eye irritation.
SKIN CONTACT	:	Does not irritate human skin.
INHALATION	:	Inhalation of fumes from overheating (above 300 deg C) PTFE (Polytetrafluoroethylene) may cause polymer fume fever, a temporary flu like illness with fever, chills, and sometimes cough, of approximately 24 hours duration. Trace amounts of carbonyl fluoride and hydrogen fluoride may also be evolved when PTFE is overheated or burned above 400 deg C. Inhalation of low concentrations of HYDROGEN FLUORIDE can initially include symptoms of choking, coughing, and severe eye, nose, and throat irritation. This is possibly followed after a symptomless period of one to two days by fever, chills, difficulty in breathing, cyanosis, and pulmonary edema. Acute or chronic overexposure to HF can injure the liver and kidneys. Inhalation, ingestion, or skin or eye contact with CARBONYL FLUORIDE may initially include: skin irritation with discomfort or rash; eye corrosion with corneal or conjectural ulceration; irritation of the upper respiratory passages; or temporary lung irritation effect with cough, discomfort, difficulty in breathing, or shortness of breath. Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures from thermal decomposition products.
CARCINOGENICITY:		Regulated
TOXICITY	:	Physiologically inert & no toxicological effects

SECTION 7 – EMERGENCY AND FIRST AID PROCEDURES

INHALATION	:	No specific intervention is indicated as the PTFE Product is not likely to be hazardous by inhalation. Consult a physician if necessary. If exposed from fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.
SKIN CONTACT	:	The PTFE Product is not likely to be hazardous by skin contact.
EYE CONTACT	:	In case of contact, immediately flush eyes with plenty of water and get medical attention if irritation occurs.
INGESTION	:	No specific intervention is indicated as the PTFE Product is not likely to be hazardous by ingestion. If gastrointestinal symptoms develop, get medical attention.

SECTION 8 – PERSONAL PROTECTION / PREVENTIVE MEASURES

RESPIRATORY	:	Where the material temperature is above 300 deg C, use a positive pressure supplied air respirator.
EYE PROTECTION	:	Not normally required.
PROTECTIVE CLOTHING	:	Not normally required.
OTHER PROTECTIVE EQUIPMENT	:	Not applicable.
VENTILATION	:	Provide local exhaust if PTFE Product is heated above 300 deg C.

SECTION 9 – REACTIVITY DATA

STABILITY	:	Stable
INCOMPATIBILITY (MATERIALS TO AVOID)	:	Molten alkali metals and interhalogen compounds.
HAZARDOUS DECOMPOSITION PRODUCTS	:	When heated above 300 deg C, may cause evolution of particulate matter, which can cause polymer fume fever. When heated above 400 deg, small amounts of hydrogen fluoride and perfluorohydrocarbons such as tetrafluoroethylene, hexafluoropropylene, perfluoroisobutylene, and carbonyl fluoride may be evolved.
HAZARDOUS POLYMERIZATION	:	Will not occur

SECTION 10 – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	:	Recover undamaged material, clean as needed, and reuse

SECTION 11 – DISPOSAL PROCEDURES

WASTE DISPOSAL METHODS RECYCLING	:	Yes
SANITORY LANDFILL	:	Yes for quantities less than 50 Kgs
INCINERATION	:	Yes, with Incineration capable of scrubbing with hydrogen fluoride & other acidic combustion products.
HAZARDOUS WASTE NUMBER	:	Not Regulated

SECTION 12 – STORAGE & HANDLING PROCEDURES

PRECAUTIONS TO BE TAKEN	:	Upto 250^{O}C – No Special Procedures
IN HANDLING AND STORAGE	:	Above 275 deg C, PTFE Product can Evolve toxic gaseous products. Provide good ventilation or respirator if there exists a probability of exceeding 260 deg C.
SPECIAL PRECAUTIONS	:	None

SECTION 13 – TRANSPORTATION

TRANSPORT HAZARDS CLASS	:	N.A.
ENVIRONMENT HAZARDS	:	None
SPECIAL PRECAUTIONS FOR TRANSPORTERS	:	None

SECTION 14 – SUITABILITY FOR SPECIAL APPLICATIONS

FOOD CONTACT	:	Not Suitable
PHARMACEUTICAL	:	Not Suitable
HUMAN BODY INPLANTS	:	Not Suitable
NUCLEAR	:	Stable
SPACE	:	Stable

SECTION 15 – INFORMATION ON ECOLOGY

This product is considered harmless to the environment and causes no ecological damage. This material is biologically inert, non-biodegradable and does not interfere with the operation of biological waste treatment plants.

CLASSIFICATION	:	Not Regulated

SECTION 16 – SUPPLIERS STATEMENT

DISCLAIMER	:	To the best of our knowledge the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy or completeness of such information. We strongly recommend that users seek and adhere to the manufacturers' or supplier's current instructions for handling each material they use and they satisfy themselves that they can meet all applicable safety and health standards.