



HYDROSEAL POLYMERS INC.

MATERIAL SAFETY DATA SHEET

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I. PRODUCT IDENTIFICATION - RIGID SPRAY FOAM SYSTEM

PRODUCT NAME: HSF 118 N-2 "B" SIDE
CHEMICAL FAMILY: POLYETHER POLYOL SYSTEM
CHEMICAL NAME: POLYETHER POLYOL
SYNONYMS: POLYOL, URETHANE RESIN
CAS NUMBER: N/A - MIXTURE
TSCA STATUS: ON INVENTORY

II. HAZARDOUS INGREDIENTS

<u>INGREDIENTS:</u> <u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>	<u>CURRENT TLV/PEL</u>
HYDROXYL TERMINATED POLY (OXYALKYLENE) POLYETHER 068909-26-2.	60 - 90	N.E
AMINE	TRACE	N.E.
1,1,1,3,3-PENTAFLUOROPROPANE 460-73-1 OSHA	6 - 12	N.E

III. PHYSICAL DATA

PHYSICAL FORM: LIQUID
COLOR: AMBER
ODOR: FAINT ETHER-LIKE ODOR
ODOR THRESHOLD: NOT ESTABLISHED
MELT POINT/FREEZE POINT: < -13 °F
BOILING POINT: NOT ESTABLISHED
VAPOR PRESSURE: <50 MM HG.
VAPOR DENSITY (AIR=1): >1.0
SPECIFIC GRAVITY: APPROXIMATELY 1.05
BULK DENSITY: APPROXIMATELY 9.8 LBS/GAL
SOLUBILITY IN WATER: CONSIDERABLE (GREATER THAN 50% SOLUBLE IN WATER)
VOC %: 0 %

IV. FIRE & EXPLOSION DATA

FLASH POINT: 203° F. PMCC
 FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER (LEL %): N.E.
 UPPER (UEL %): N.E.
 AUTO-IGNITION TEMPERATURE: NOT ESTABLISHED

EXTINGUISHING MEDIA: DRY CHEMICAL EXTINGUISHERS SUCH AS MONOAMMONIUM PHOSPHATE, POTASSIUM SULFATE, POTASSIUM CHLORIDE. ADDITIONALLY, CARBON DIOXIDE, HIGH EXPANSION (PROTEINIC) CHEMICAL FOAM, WATER SPRAY FOR LARGE FIRES.

SPECIAL FIRE FIGHTING PROCEDURES: DO NOT DIRECT SOLID WATER STREAM OR FOAM INTO HOT, BURNING POOLS; THIS MAY CAUSE FROTHING AND INCREASE FIRE INTENSITY. USE SELF-CONTAINED BREATHING APPARATUS AND BODY COVERING PROTECTIVE CLOTHING; BURNING CAN PRODUCE OXIDES OF CARBON AND NITROGEN.

UNUSUAL FIRE / EXPLOSION HAZARDS: DO NOT CUT, WELD OR GRIND ON OR NEAR CONTAINER DUE TO POSSIBLE TOXIC FUME GENERATION OR EXPLOSION DUE TO FLAMMABLE VAPOR RESIDUE. USE EXPLOSION PROOF EQUIPMENT WHERE VAPOR CONCENTRATIONS CAN BECOME IGNITABLE. GROUND TRANSFER LINES AND EQUIPMENT.

V. HEALTH EFFECTS DATA

ANIMAL TOXICITY:	ORAL, LD 50 (INGESTION)	N.E.
	DERMAL, LD 50 (SKIN CONTACT)	N.E.
	INHALATION, LC 50 (4 HRS)	N.E.
	AQUATIC, LC 50 (24 HRS)	N.E.
	EYES	N.E.
	SKIN	N.E.

HUMAN EFFECTS OF OVEREXPOSURE:
 EYES: MAY CAUSE SLIGHT IRRITATION TO THE EYES.

INHALATION: MAY CAUSE IRRITATION TO THE THROAT AND RESPIRATORY PASSAGES, BUT AT ROOM TEMPERATURE. VAPOR INHALATION IS NOT CONSIDERED HAZARDOUS. VAPORS MAY CAUSE DIZZINESS, TREMORS, CARDIAC ARRHYTHMIA AND CARDIAC ARREST.

SKIN: THIS PRODUCT CONTAINS AMINE CATALYST AND WILL CAUSE IRRITATION TO THE SKIN AFTER PROLONGED CONTACT. SOME INDIVIDUALS MAY BE MORE SENSITIVE TO EXPOSURE.

INGESTION: THIS IS NOT CONSIDERED A COMMON OCCUPATIONAL ROUTE OF EXPOSURE, AND NO OBSERVABLE EFFECTS HAVE BEEN DEMONSTRATED.

THRESHOLD LIMIT VALUE (ACGIH): NO TLV HAS BEEN ESTABLISHED FOR THIS PRODUCT AS A SYSTEM.
 PERMISSIBLE EXPOSURE LIMIT (OSHA): SAME AS ABOVE.

VI. EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: FLUSH WITH CLEAN, LUKEWARM WATER AT LOW PRESSURE FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING EYELIDS. CONSULT A PHYSICIAN IMMEDIATELY.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREAS THOROUGHLY WITH WARM SOAPY WATER. CONTAMINATED CLOTHING SHOULD BE PROPERLY LAUNDERED BEFORE REUSING.

INHALATION: REMOVE VICTIM FROM AREA OF EXPOSURE TO SAFE AREA.

INGESTION: INDUCE VOMITING. NEVER INDUCE VOMITING OR GIVE ANYTHING TO DRINK TO AN UNCONSCIOUS

PERSON.

NOTE TO PHYSICIAN: BASICALLY, TREATMENT IS SYMPTOMATIC.

VII. EMPLOYEE PROTECTION RECOMMENDATIONS

EYE PROTECTION: LIQUID CHEMICAL GOGGLES OR FULL FACE SHIELD. NO CONTACT LENSES SHOULD BE WORN.

SKIN PROTECTION: CHEMICAL RESISTANT GLOVES SUCH AS NATURAL RUBBER OR POLYVINYL ALCOHOL. COVER AS MUCH EXPOSED SKIN AS POSSIBLE WITH APPROPRIATE CLOTHING. IF SKIN CREAMS ARE USED, KEEP THE AREA COVERED BY THE CREAM TO A MINIMUM.

RESPIRATORY PROTECTION: THIS PRODUCT HAS DEMONSTRATED NO OBSERVABLE EFFECTS AT ROOM TEMPERATURE, HOWEVER, IT IS HIGHLY RECOMMENDED THAT AN AIR PURIFYING RESPIRATOR WITH ORGANIC FILTER CARTRIDGES BE WORN. IN ADDITION, IN ANY SPRAY APPLICATION, A SUPPLIED AIR SOURCE MUST BE PROVIDED.

VENTILATION: NATURAL OR MECHANICAL. LOCAL EXHAUST WILL KEEP THE TLV BELOW MINIMUM IN MOST CASES. SPILLS OR OTHER EMERGENCIES MAY REQUIRE MORE FORCEFUL VENTILATION MEANS.

OTHER: SAFETY SHOWERS AND EYE WASH STATIONS SHOULD BE PROVIDED IN ALL WORK AREAS. ALL EMPLOYEES SHOULD BE PROPERLY TRAINED.

VIII. REACTIVITY DATA

STABILITY: STABLE

POLYMERIZATION: WILL NOT OCCUR.

INCOMPATIBILITY: OXIDIZING MATERIALS, ISOCYANATES, AND ACIDS.
ALKALI OR ALKALINE EARTH METALS (ALUMINUM, ZINC, BERYLLIUM AND COPPER)

HAZARDOUS DECOMPOSITION PRODUCTS: ALIPHATIC FRAGMENTS, CO, CO₂.

IX. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: CONTAIN THE SPILLED MATERIAL AND THEN COVER WITH A LOOSE, ABSORBENT MATERIAL SUCH AS OILDRY, VERMICULITE, SAWDUST OR FULLER'S EARTH. SHOVEL WASTE MATERIAL INTO PROPER WASTE CONTAINERS AND WASH THE CONTAMINATED AREA WITH HOT SOAPY WATER, THOROUGHLY. VENTILATE AREA TO REMOVE VAPORS.

WASTE DISPOSAL METHODS: WASTE MATERIAL MAY BE INCINERATED OR DISPOSED OF UNDER LOCAL, STATE AND FEDERAL REGULATIONS CONTROLLING ENVIRONMENTAL PROTECTION.

EMPTY CONTAINER PRECAUTIONS: EMPTY CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. ALL CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENT REGULATIONS.

X. SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE: (MIN/MAX): 65° F (18° C) TO 75° F (24° C)

AVERAGE SHELF LIFE: SIX (6) MONTHS FROM DATE OF MANUFACTURE.

SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE): THIS PRODUCT IS HYGROSCOPIC. CONTAINERS SHOULD BE

TIGHTLY SEALED TO PREVENT MOISTURE CONTAMINATION. DO NOT EXPOSE TO HIGH TEMPERATURES FOR ANY LENGTH OF TIME.

PRECAUTIONS IN HANDLING AND STORAGE: IF CONTAMINATION WITH ISOCYANATES IS SUSPECTED, DO NOT RE-SEAL CONTAINER BECAUSE OF POSSIBLE RUPTURE DUE TO PRESSURE BUILDUP. ALWAYS SLOWLY VENT CONTAINER WHEN OPENING TO RELIEVE ANY PRESSURE BUILDUP.

XI. SHIPPING DATA

TECHNICAL SHIPPING NAME:	POLYPROPYLENE GLYCOL	
FREIGHT CLASS (BULK):	POLYPROPYLENE GLYCOL	
FREIGHT CLASS PACKAGE:	POLYPROPYLENE GLYCOL	
PRODUCT LABEL:	ESTABLISHED	
PLACARDS REQUIRED:	NONE	HMIS: F-1, H-1, R-0

DOT (HM-181) (DOMESTIC SURFACE)

PROPER SHIPPING NAME:	NON REGULATED
HAZARD CLASS OR DIVISION:	NON REGULATED
UN/NA NUMBER:	NONE
HAZARDOUS SUBSTANCE	NONE
HAZARD PLACARD(S)	NONE

IMO / IMDG CODE (OCEAN)

PROPER SHIPPING NAME:	NON REGULATED
HAZARD CLASS DIVISION NUMBER	NON REGULATED
UN NUMBER	NONE

IN CASE OF SPILL EMERGENCY CALL CHEMTREC (800) 424-9300

XII. REGULATORY INFORMATION

OSHA CLASSIFICATION: NONE.

TSCA REGULATIONS: ALL INGREDIENTS ARE ON THE TSCA CHEMICAL SUBSTANCE INVENTORY

EPCRA SECTION 313 (40 CFR 372): THIS PRODUCT CONTAINS NO CHEMICALS REQUIRED FOR REPORTING.

CERCLA: NONE

OTHER REGULATIONS/LEGISLATION WHICH APPLY TO THIS PRODUCT: NONE DETERMINED

THIS PRODUCT DOES NOT CONTAIN ANY OZONE DEPLETING SUBSTANCES.

CANADIAN CLASSIFICATION: NOT ESTABLISHED.

CONTROLLED PRODUCTS REGULATIONS (WHMIS) CLASSIFICATION: NOT ESTABLISHED

CEPA/ CANADIAN DOMESTIC SUBSTANCE LIST (DSL): NOT ESTABLISHED.

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