SAFETY DATA SHEET



Date-Issued: 12/01/2016 SDS Ref. No: XXXXX Date-Revised: 06/28/2001 Revision No: New MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Polypropylene

PRODUCT DESCRIPTION: Formflex Polypropylene Sheet

MANUFACTURER

Formflex.
One North Main Street
P.O. Box 218
Bloomingdale, IN 47832

TELEPHONE NUMBERS

Phone: (800) 255-7659 or (765) 498-8900

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	CAS# EINEC S#
Propylene ethylene copolymer	>95	9010- 79-1
Stabilizers (trade secret)	<5	

COMMENTS:

This product is not considered a hazardous material at temperatures below the melting point according to the U.S. Occupational Safety and Health Act definitions and regulation, including the Hazard Communication Standard 29 CFR 1910.1200. This product is not considered a controlled substance according to Canada's WHMIS regulations. Threshold Limit Values (TLV) or Permissible Exposure Limit (PEL) values are not established. This material is not expected to cause physiologic impairment at low

concentration. Until a specific TLV is adopted by ACGIH (American Conference of Governmental Hygienists), or an OSHA (Occupational Safety and Health Administration) PEL standard is issued, it is suggested that this material be treated as a nuisance dust or particulate in accordance with the recommendations of ACGIH.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Translucent to white solid pellets

IMMEDIATE CONCERNS: Spilled material may present a slipping hazard. This product as shipped is not classified as a combustible dust; however, a combustible concentration of dust may occur if fines are suspended in air. Avoid contact with strong oxidizing agents. When working with the material at temperatures above the melting point, the material will begin to decompose producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes and other unidentified organic compounds that come from the breakdown of the material. Adequate room and extruder ventilation should be provided to minimize exposures.

POTENTIAL HEALTH EFFECTS

EYES: Process vapors may irritate eyes.

SKIN: Exposure to molten resin may cause thermal burns.

INGESTION: Not Applicable

INHALATION: Process vapors may cause respiratory tract irritation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation or redness.

SKIN: Not Applicable

INGESTION: Not Applicable

INHALATION: Irritation of the nose, throat and respiratory tract.

ACUTE TOXICITY: Process vapors may cause eye and respiratory tract irritation.

CHRONIC: None Known

CARCINOGENICITY: None Known

MUTAGENICITY: None Known

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: None Known

TERATOGENIC EFFECTS: None Known

MEDICAL CONDITIONS AGGRAVATED: None Known

ROUTES OF ENTRY: Eye, Inhalation

TARGET ORGAN STATEMENT: None Known

CANCER STATEMENT: This product is not considered to be a carcinogen by OSHA, IARC or NTP.

IRRITANCY: Exposure to process vapors may cause eye and respiratory tract irritation.

SENSITIZATION: None Known

WARNING CAUTION LABELS: Burn Risk - Avoid contact with molten resin.

Explosion Risk - Prevent accumulation of dust particles.

Slipping Risk - Keep walking surfaces free of spilled material.

Vapor Risk - Provide ventilation to avoid exposure to process vapors.

COMMENTS:

HEALTH: None

HEALTH HAZARDS: Process vapors may cause eye and respiratory tract irritation.

PHYSICAL HAZARDS: Spilled material may present a slipping hazard.

Exposure to molten resin may cause thermal burns.

4. FIRST AID MEASURES

EYES: Flush eyes with water for 15 minutes. Get medical attention.

SKIN: Molten Resin: If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get medical attention.

INGESTION: Not Applicable

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

ANTIDOTES: Not Applicable

NOTES TO PHYSICIAN: None

ADDITIONAL INFORMATION: None

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Determined

FLAMMABLE LIMITS: Not Determined

AUTOIGNITION TEMPERATURE: Not Determined

EXTINGUISHING MEDIA: Use foam, carbon dioxide, or water spray when fighting fires involving this material.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, unidentified organic compounds.

EXPLOSION HAZARDS: Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air.

FIRE FIGHTING PROCEDURES: Standard procedures for Class A fires.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained pressure demand breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Static discharge could be an ignition source for a combustible concentration of dust.

SENSITIVITY TO IMPACT: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep up material and place in a disposal container.

LARGE SPILL: Vacuum or sweep up material and place in a disposal container.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Keep pellets out of waterways.

LAND SPILL: Not Determined

AIR SPILL: Not Applicable

GENERAL PROCEDURES: Vacuum or sweep up material and place in a disposal

container.

RELEASE NOTES: None

SPECIAL PROTECTIVE EQUIPMENT: None

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Ground and bond containers when transferring material.

STORAGE: This product may react with strong oxidizing agents and should not be stored near such materials. Store boxes and bags of material in areas protected with automatic sprinklers.

STORAGE TEMPERATURE: 60°C (140°F) maximum

LOADING TEMPERATURE: Not Determined

STORAGE PRESSURE: Not Determined

STORAGE TEMPERATURE: Store in a cool place below 140 F, 60 C.

LOADING TEMPERATURE NOTES: Not yet determined

SHELF LIFE: Not Determined

SPECIAL SENSITIVITY: Not yet determined

ELECTROSTATIC ACCUMULATION HAZARD: Material may accumulate static charges during transfers. Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate room ventilation.

Provide adequate ventilation at the extruder to minimize exposure to process vapors. Eliminate ignition sources during repair and maintenance operations.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles).

SKIN: When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over the skin to prevent contact.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134, ANSI Z88.2 and/or CSA Z94.4-93 requirements must be followed whenever workplace conditions warrant use of a respirator.

PROTECTIVE CLOTHING: When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over the skin to prevent contact.

WORK HYGIENIC PRACTICES: Not Established

OTHER USE PRECAUTIONS: Eyewash fountains and safety showers should be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Slight waxy odor

APPEARANCE: Pellet

COLOR: Translucent to white

FREEZING POINT: Not Applicable

MELTING POINT: >120°C (248°F)

DENSITY: Not Determined

SPECIFIC GRAVITY: 0.88 to 0.92

VISCOSITY: Not Available

MOLECULAR WEIGHT: Not Available

(VOC) NOTES: Not yet determined

COMMENTS:

PHYSICAL STATE: None

PERCENT VOLATILE: < 0.4%

VAPOR PRESSURE: Not Applicable

VAPOR DENSITY: Not Applicable

BOILING POINT: Not Applicable

WATER SOLUBILITY: Negligible

EVAPORATION RATE: Not Applicable

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Keep away from heat, sparks and flame.

POLYMERIZATION: Product will not undergo polymerization.

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures the material will begin to decompose, producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, unidentified organic compounds.

INCOMPATIBLE MATERIALS: Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

GENERAL COMMENTS: None Known

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Available

ECOTOXICOLOGICAL INFORMATION: Not Determined

DISTRIBUTION: Not Determined

CHEMICAL FATE INFORMATION: Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: (1) Recycle (reprocess). (2) Incineration including energy recovery of waste material in a permitted facility in accordance with local, state or provincial and federal regulations. (3) Landfilling in a licensed facility in accordance with local, state or provincial and federal regulations.

RCRA HAZARD CLASS: This product is not judged to be a hazardous waste by any local, state or federal regulations; however, it may be listed as industrial waste in some states or provinces.

This product is not listed in the U.S. federal hazardous waste regulations, 40 CFR

261.33 paragraphs (e) or (f), i.e., chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C. State or local hazardous waste regulations may apply if different from the federal.

14. TRANSPORT INFORMATION

SPECIAL SHIPPING NOTES: This product is not regulated by DOT, IMO, IATA, Canadian TDG and associated regulations, ADR or RID.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

TITLE III NOTES: This product is not subject to SARA Title III requirements.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients in this product are in compliance with TSCA.

OSHA HAZARD COMM. RULE: This product is not considered a hazardous material at temperatures below the melting point according to OSHA definitions.

CLEAN WATER ACT: This product is regulated under EPA's Clean Water Act/NPDES rules as "floating material". In addition, this product is considered "significant material" under the EPA's storm water permit rules.

CANADA

WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION

SYSTEM): This product is not considered a controlled substance under WHMIS. This MSDS meets WHMIS format requirements.

CANADIAN ENVIRONMENTAL PROTECTION ACT: This product contains an additive which has been notified to CEPA for DSL listing; however, this additive is not yet DSL listed. All other ingredients in this product are listed on the DSL.

16. OTHER INFORMATION

MANUFACTURER DISCLAIMER:

The information contained in this Material Safety Data Sheet has been compiled from sources, which Formflex considers reliable and accurate to the best of Formflex's knowledge. The information relates only to the specific product described above, and not to use of the

product in combination with another material. Customers and other users should read this MSDS and the product label carefully before using the product. Formflex neither assumes, nor authorizes anyone to assume on Formflex's behalf, any liability in connection with the use of the information in this MSDS.

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