

PROTO-PASTA HIGH TEMPERATURE PLA

DOC VERSION: 1

REV DATE:

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Proto-pasta High Temperature PLA

SYNONYMS: Proto-pasta HTPLA

PRODUCT CODES:

MANUFACTURER: Proto Plant

ADDRESS: 5601 East 18Th Street #102

Vancouver, WA 98661

EMERGENCY PHONE: 503-877-5268
OTHER CALLS: 503-877-5268
HOMEPAGE: www.protoplant.com

CONTACTS: Dustin Cram – Chief Engineer

Sara Shepherd – MSDS Coordinator

dustin@protoplant.com info@protoplant.com

PRINT DATE: 7/24/2014

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTSCAS NO.% WTSARA 313 REPORTABLEPolylactide resin9051-89-2None

SECTION 2 NOTES: All components of this product are either listed on or exempt from listing on the TSCA Inventory. No hazardous ingredients subject to reporting under the Toxic Chemical Release Inventory (SARA 313) are known at this time.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

This is a polymeric compound. All ingredients are encapsulated by the polymer and present no likelihood of exposure under normal conditions of processing and handling.

POTENTIAL HEALTH EFFECTS

EYES: Solid/dust may cause irritation due to mechanical action.

Processing fumes may cause irritation.

SKIN: Filament is not likely to cause irritation.

Contact with molten material may cause thermal burns.

INGESTION: Not a probable route of exposure. Obtain immediate medical attention.

INHALATION: Processing fumes may cause irritation to the respiratory tract.

CHRONIC HEALTH HAZARDS: None known for this compound.

SECTION 3 NOTES: Low hazard for usual industrial or commercial handling.



PROTO-PASTA HIGH TEMPERATURE PLA

DOC VERSION: 1
PRINT DATE: 7/24/2014 REV DATE:

SECTION 4: FIRST AID MEASURES

EYES: Flush with water. Consult physician if symptoms persist.

SKIN: Wash with soap and water. For thermal burns, immediately flush with cold water. Do not attempt to remove polymer from skin. Obtain medical attention.

INGESTION: Obtain immediate medical attention. For a poison emergency in the U.S. call 1-800-222-1222.

INHALATION: Leave exposed area and seek fresh air. If irritation persists, seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY CLASS: 1 FLASH POINT: None LEL: None UEL: None

EXTINGUISHING MEDIA:

Foam. Water. Carbon Dioxide (CO2). Dry Chemical. Alcohol resistant foams are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.

SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear NIOSH approved self contained breathing apparatus and full protective equipment.

UNUSUAL FIRE & EXPLOSION HAZARDS:

This compound has no unusual fire or explosion hazards.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Sweep up scrap and store material neatly to prevent slipping hazard.

ENVIRONMENTAL PRECAUTIONS:

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:

Store in a cool, dry place. Product as shipped is not a combustible dust. Mechanical handling can cause the formation of dusts. To reduce the risk for dust explosion do not permit dust to accumulate.

OTHER PRECAUTIONS:

Proper purging and shut down procedures should be followed to avoid overheating of this compound. Product as shipped is not a combustible dust.



PROTO-PASTA HIGH TEMPERATURE PLA

DOC VERSION: 1 PRINT DATE: 7/24/2014

REV DATE:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ensure adequate ventilation on workstation. Avoid dust build up.

VENTILATION: Local exhaust is preferred.

RESPIRATORY PROCTECTION: A NIOSH approved respirator is recommended for protection against processing fumes, or

from dust generated from grinding, sanding, or sawing operations.

EYE PROTECTION: Safety glasses with side shields are recommended.

SKIN PROTECTION: Impervious clothing. For prolonged handling, canvas or cotton gloves are recommended.

WORK HYGIENIC PRACTICES: Wash hands and dry hands thoroughly before and after handling product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Opaque, smooth, thin strand

ODOR: No odor.

PHYSICAL STATE: Solid

VOLATILES: volume %:N/AP weight %: N/AP

PH: Not applicable

DENSITY: 1.24 g/cc

BOILING POINT/RANGE: Not applicable

DECOMPOSITION TEMPERATURE: 482F (250C)

MELTING POINT/RANGE: Not determined

WATER SOLUBILITY: Insoluble

SOLUBILITY IN OTHER SOLVENTS: None known

SECTION 10: STABILITY AND REACTIVITY

STABLE Χ

UNSTABLE

STABILITY: Stable under recommended storage conditions CONDITIONS TO AVOID: Temperatures above 446F (230 °C).

MATERIALS TO AVOID: Oxidizing agents. Strong bases.

Hazardous decomposition products: Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide (CO). carbon dioxide (CO2).

Polymerization: Not applicable



PROTO-PASTA HIGH TEMPERATURE PLA

DOC VERSION: 1
PRINT DATE: 7/24/2014 REV DATE:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No specific toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No specific information is available. Material is considered to be non-biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. For recycling, contact local waste disposal centers.

SECTION 14: TRANSPORT INFORMATION

SECTION 14 NOTES: Not regulated under the US Department of Transportation.

SECTION 15: REGULATORY INFORMATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right To Know Act of 1986 and of 40 CFR 372: NONE

SECTION 16: OTHER INFORMATION

DISCLAIMER: ProtoPlant believes that the information contained herein is accurate as of the date hereof. HOWEVER, NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREIN AS TO THE INFORMATION PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. The health and safety precautions contained herein may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. Nothing contained herein shall be construed as a license for the use of any product in a manner that would infringe existing patents.