

SAFETY DATA SHEET



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Environmental Health & Safety
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TRANSPORTATION EMERGENCY
CALL Envirocare: (866) 230-8485

NON-TRANSPORTATION
Emergency Phone: (866) 230-8485
Information Phone: (888) 874-7787

1. Product and Company Identification

Product Name:	Elast-Eon 2A (E2A)	Elast-Eon 4 (E4)
	Elast-Eon 2As (E2As)	Elast-Eon 5-130 (E5-130)
	Elast-Eon 2-852 (E2-852)	Elast-Eon 5-305 (E5-305)
	Elast-Eon 2-860 (E2-860)	Elast-Eon 5-325 (E5-325)
	Elast-Eon 2-862 (E2-862)	Elast-Eon 5-355 (E5-355)
	Elast-Eon 2-945 (E2-945)	

Chemical Family: *Thermoplastic Polyurethane*
Description: *Elast-Eon*
SDS No.: 1016
Product Use & Restrictions: *Material's intended use is for extrusion and injection molding of medical devices.*

2. Hazards Identification

OSHA

All components have been reviewed and categorized as non-hazardous in this formulation according to CFR 29 1910.1200.

GHS label Elements

Pictogram: N/A

Signal Word: warning

Precautionary Statements: Prevent dust accumulation to prevent formation of combustible dust concentration in air.

Hazard Statements: Melted product is flammable and produces intense heat and dense smoke during burning. Contact with hot material will cause thermal burns.
Irritating gases or fumes may be given off during burning or thermal decomposition.
May cause mechanical irritation (abrasion).
Causes a slipping hazard if spilled.

See Section 11 for complete health hazard information.

3. Composition/Information on Ingredients

Components:	CAS-No:	Weight %:
Polyurethane TPU	Trade Secret	100

4. First aid measures

Eye contact

In case of contact, flush eyes with copious amounts of water for a minimum of 15 minutes.
Seek medical attention if irritation persists.

Skin contact

Seek medical attention if thermal burn occurs.
For burns, immediately flood burnt area with plenty of water and cover area with a clean, dry dressing.
If molten material should contact the skin and adhere, cool quickly with running water do not attempt to remove.
Seek immediate medical attention.

Inhalation

Move to fresh air in the event of accidental inhalation of fumes that result from overheating or combustion of the product. If symptoms continue, seek medical attention.

Ingestion

If discomfort persists seek medical attention.

Notes to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media: Water fog, Foam, Dry chemical
Do not use water jets!

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes such as carbon oxides and possibly hydrogen cyanide.

Unusual Fire/Explosion Hazards

Toxic and irritating gases or fumes may be given off during burning or thermal decomposition.
Solid does not readily release flammable vapors.

Note: Material is a combustible solid.

6. Accidental release measures

Spill and Leak Procedures

Clean up promptly by sweeping or vacuuming.
Place into an appropriately marked container for disposal.
Material spills may cause a safety hazard such as slipping or tripping.
If molten, allow material to cool prior to handling .

7. Handling and storage

Storage period

Not Established

Storage Precautions

Avoid breathing dust. Containers should be kept tightly closed to prevent contamination. Material is hygroscopic and may absorb small amounts of atmospheric moisture. Store in well ventilated place. Use good housekeeping measures to prevent dust accumulations.
Store in a cool, dry place and out of direct sunlight. Keep containers closed at all times to prevent accumulation of moisture.

Handling Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash hands thoroughly after handling. Loading and unloading may cause nuisance dust to form. Conduct any operations emitting fumes or vapors (including heat joining, cutting and or sealing of articles and clean up) under well ventilated conditions. Avoid breathing process vapors. Do not hold product for extended periods of time at elevated temperatures or allow thick masses of hot polymer to accumulate because they can decompose emitting hazardous gasses. Do not taste, swallow, or chew products. Wash thoroughly after processing. Do not store or consume food in processing areas. Fume condensates may include hazardous contaminants from additives. Condensate may be combustible and should be periodically removed from exhaust hoods, ductwork, and other surfaces. Impervious gloves should be worn during cleanup operations to prevent skin contact. Post thermal processing activities necessary to produce molded articles (such as cutting, sanding, sawing, grinding, drilling, or regrinding) may create dust or "fines". Powders, dust, and/ or fines may pose a dust explosion hazard. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which void static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. The major off-gasses from normal melt processing are expected to be water vapor and carbon dioxide. Other trace volatile organic components may also be emitted. Do not smoke in areas where polymer dust is present. Wash hands after handling.

8. Exposure controls/personal protection

Exposure Guidelines

There are no current permissible exposure limits for this product as a whole.

Industrial Hygiene/Ventilation Measures

During normal processing, use general dilution and/or local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards/guidelines. Special ventilation and personal protective equipment (PPE) is required to control exposure to potentially harmful decomposition products whenever it is heated to temperatures above its decomposition temperature. Examples would include hot knife cutting, grinding, or sawing.

Respiratory protection

In the absence of sufficient general dilution or local exhaust ventilation a NIOSH approved respirator may be needed during die cleaning, high temperature processing, purging, or when thermal decomposition is suspected. Respiratory protection programs must comply with 29 CFR 1910.134

Hand protection

Heat resistant gloves are recommended when handling molten material.

Wear hand protection when handling pellets as they may be dusted with fumed silica

Eye protection

Safety glasses with side-shields should be worn

Skin and body protection

Wear hand protection when handling pellets as they may be dusted with fumed silica.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. **DO NOT PLACE IN MOUTH.**

9. Physical and chemical properties

Form:	Solid
Appearance:	Pellet
Color:	Varies
Odor:	Slight
Odor Threshold:	Not Applicable
pH:	Not Applicable
Melting Point:	140-200°C
Flash point:	Not Applicable
Boiling point:	Not Applicable
Lower explosion limit:	Not Applicable
Evaporation rate:	Not Applicable
Upper explosion limit:	Not Applicable
Specific Gravity:	0.98-1.09
Vapor Density:	Not Applicable
Vapor Pressure:	Not Applicable
Solubility in Water:	Not soluble
Auto ignition temperature:	Not Determined
Decomposition temperature:	>230°C
Softening point:	Not Determined
Bulk density:	Not Determined

10. Stability and reactivity

Hazardous Reactions

Hazardous polymerization will not occur.

Stability

This material is stable under standard storage and handling conditions.

Incompatible Materials

Keep material away from acids and strong oxidizing agents.

Conditions to avoid

Keep away from flames.

11. Toxicological information

Toxicity Note

The information provided on the hazardous ingredient(s) listed below applies to the individual ingredient(s) in their pure form. The form of the ingredient(s) provided to you is encapsulated in plastic and as a consequence the values presented by this data may not be representative of the finished product. No data exists on the finished product. Individual component information is listed below as applicable.

Potential Health Effects

Primary Routes of Entry:	Inhalation, Skin Contact, Eye Contact
Medical Conditions Aggravated by Exposure:	Respiratory disorders

Potential Health Effects

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Inhalation: Processing vapors may be irritant to mucous membranes and respiratory tract.

Skin contact: Exposure to molten material may cause deep skin burns. Molten material may adhere to skin.

Eye contact: Exposure to the pellets/particles may cause discomfort due to particulate nature.

May cause physical irritation of the eye.

Ingestion: No adverse effect expected, however large amounts may cause nausea and vomiting.

12. Ecological information

No data available for this product.

13. Disposal considerations

Waste Disposal Method

Waste disposal shall be managed in accordance with existing federal, state and local environmental control laws.

14. Transport information

Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

15. Regulatory information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous

TSCA Status (40 CFR 720.3):

Material is US TSCA Inventory exempt.

U.S. EPA CERCLA Hazardous Substances (40 CFR 302):

Components

None present or none present in regulated quantities.

SARA Section 311/312 Hazard Categories:

Non-hazardous under Section 311/312

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components

This product does not contain >1% of any chemical substance on the SARA Extremely hazardous substance list.

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components

None present or none present in regulated quantities.

U.S. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Components

None

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements contact the appropriate state or federal agencies.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

This product does not contain >1% of any chemical substance on the above listed state right to know lists.

16. Other information

HMIS Rating

Health	0
Flammability	1
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

The method of hazard communication for Biomerics LLC is comprised of Product Labels and Safety Data Sheets. HMIS and/or NFPA ratings are provided by Biomerics LLC as a customer service.

SDS Number: 1016
Version Date: 11/19/18
Version: 2.00
Updates: Updated to GHS standards, additional part numbers, TSCA, and state right to know.
Updated company address and emergency phone numbers

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