

SAFETY DATA SHEET

Nomaco, Inc.

Section 1: Identification

Product Identifier:

Product Name..... : HercuLean™
Chemical Family..... : Thermoplastic polymer; Polypropylene Plastic
Recommended Use..... : HercuLean™ can be used in a wide variety of applications including boatbuilding, transportation, construction and packaging.

Restrictions of Use : None Known

Manufacturer:

Nomaco Inc.
501 Innovative Way
Zebulon, NC 27597
919-269-6500 / 800-345-7279

Section 2: Hazard Identification

OSHA HAZARD COMMUNICATION STANDARD

This product is considered an article according to 29 CFR 1910.1200. This "Non Hazardous Chemical" is exempt as defined by the OSHA Hazard Communication Standard.

While this product is classified as a "Non Hazardous Chemical" as defined by OSHA Hazard Communication, this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product.

A flammable hydrocarbon gas is used as a blowing agent in Polypropylene Foam. Trace amounts of this gas may remain in the product at the time of shipment.

POTENTIAL HEALTH EFFECTS:

Eye: Dust may cause irritation or eye injury due to mechanical action.

Skin: Non-irritating to skin. Skin absorption is unlikely.

Inhalation: Dust may cause irritation to the nose, throat and lungs. Concentrations of the isobutane agent incidental to proper handling of the product are expected to be well below the ACGIH recommended exposure limit of 800 ppm.

Ingestion: None determined.

Systemic Effects (Other target organs): None determined. OSHA: Medical Conditions: Not regulated. Aggravated by Exposure: None determined.

Section 3: Composition / Information on Ingredients

INGREDIENT NAME	CAS NUMBER	PERCENT CONCENTRATION
Polypropylene	9003-07-0	85-100%
Other Proprietary Additives	N/A	2 – 15%

The specific chemical identity and exact percentage concentration of the composition has been withheld as a trade secret.

Section 4: First-Aid Measures

Eye: Flush eyes with clean, lukewarm water (low pressure) occasionally lifting eyelids.

Ingestion: If swallowed, consult physician.

Skin: Wash with soap and water.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Oxygen may be given by qualified personnel if breathing is difficult. Seek medical attention.

Section 5: Fire-Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers, Carbon dioxide fire extinguishers. Foam.

Fire Fighting Procedures: Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

Special Firefighting Procedures: Full emergency equipment with pressure demand self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, irritating and heavy toxic gases may be generated by thermal decomposition or combustion.

Unusual Fire and Explosion Hazards: Mechanical cutting, grinding, or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. Dense smoke is emitted when burned without sufficient oxygen.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated.

Section 6: Accidental Release Measures

Spill or Leak Procedures: No special precautions are necessary. This product is a non-hazardous waste when spilled or disposed of, as defined in Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 261).

Section 7: Handling and Storage

Precautions for Safe Handling:

This product is combustible and should not be exposed to open flames. Large quantities of this product can burn rapidly and release toxic gases, including carbon monoxide.

Conditions for Safe Storage:

Keep away from temperatures greater than 200°F. This material is combustible and should not be exposed to open flame or other ignition sources.

Flammable vapors of isobutane may be generated during unventilated storage of large amounts of this product (for example, in storage trailers). To prevent the build-up of flammable vapors, do not store large quantities of this product in unventilated spaces including trailers.

Incompatibilities:

This product is incompatible with strong oxidizing agents (for example: Hydrogen Peroxide, Chlorine, Potassium Nitrate, Nitric and Sulfuric Acids).

Section 8: Exposure Controls / Personal Protection

Some of the additives in this product may have exposure guidelines; however these additives are captured in the product and no exposure would be expected under normal handling conditions.

Exposure Limits: Not established for products as a whole.

Engineering Controls: Provide general and/or local exhaust ventilation to control airborne isobutane levels below ACGIH Threshold Limit Value (TLV) of 800PPM. OSHA does not have a PEL for isobutane, which is affirmed as "generally recognized as safe" as a direct human food ingredient according to 21 CFR 184.1165. No toxic effects reported below 18,000 ppm.

INGREDIENT NAME	CAS NUMBER	EXPOSURE LIMITS Wt. %
Isobutane	75-28-5	800 ppm TWA (ACGIH)

Eye Protection Requirements: Wear tight fitting safety goggles if there is a potential for exposure to flying particles.

Skin Protection Requirements: No special precautions.

Respiratory Protection Requirements: No protection is required if isobutane levels are maintained below the ACGIH TLV of 800 ppm. For exposures above the TLV, take into consideration the type of application, environmental concentrations and materials being used concurrently when selecting a respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Section 9: Physical and Chemical Properties

Physical Form: Flexible solid.

Color: Residual isobutane is colorless.

Odor: No Odor. Residual isobutane has a gasoline-like or natural gas odor. Butane is reported to be detectable by odor at a range of 1262-5048 ppm (AIHA, 1989).

Odor Threshold: Not applicable.

Flash Point: Not applicable.

Method Used: Not applicable.

Flammability Limits: Upper: Not applicable.
Lower: Not applicable

Vapor Pressure: Not applicable.

Vapor Density: Not applicable.

Boiling Point: Not applicable.

Solubility in water: Insoluble.

Density: 60 - 250 kg/m³

Section 10: Stability and Reactivity

Reactivity: Non-Reactive

Stability: This is a stable material.

Conditions to Avoid: Avoid sparks, open flame or excessive heat. Avoid contact with oxidizers. Avoid unvented spaces.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and other toxic gases are generated under combustion conditions.

Section 11: Toxicological Information

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity: NTP: Not listed.
IARC: Not listed.

Section 12: Ecological Information

This product is inert to the environment and is not expected to exhibit any significant biodegradation.

Section 13: Disposal Considerations

Waste may be reused, recycled or buried in an approved landfill. Follow all regulatory requirements for disposal.

Section 14: Transport Information

DOT Shipping Requirements: Not regulated

IATA Shipping Requirements: Not regulated

Additional transportation information may be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15: Regulatory Information

OSHA STATUS: This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

CERCLA RQ: None

SARA Title III:
Section 302

Extremely Hazardous Substances: None.

Section 311/312 Hazard Categories: Non-hazardous.

Sections 313 Hazard Categories: None.

RCRA Status: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether the product should be classified as a hazardous waste (40 CFR 261.20-24).

National Fire Protection Association (NFPA) Ratings: Health 0
Flammability 1
Reactivity 0
Special Hazards None

Canadian Regulations: This product is not a "Controlled Product" under WHMIS.

California Proposition 65: This product may contain small percentages of chemical(s) known to the state of California to cause cancer and/or birth defects. All potential hazardous chemicals with concentrations in the final product greater than 0.1% by weight are listed in Section 3.

Section 16: Other Information

This product is considered an article according to 29 CFR 1910.1200. This "Non Hazardous Chemical" is exempt as defined by the OSHA Hazard Communication Standard.

While this product is classified as a "Non Hazardous Chemical" as defined by OSHA Hazard Communication, this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product.

NOTICE: Each customer must determine whether the products discussed and the information contained in this document is appropriate for its use. NO WARRANTIES ARE GIVEN: ALL EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. It is the Customer's responsibility to ensure that workplace and disposal practices are compliant with any applicable laws. Information provided as a result of testing and analysis by Nomaco is accurate as of the date shown below. Conditions of use and applicable laws may change with time and differ from one location to another, therefore this information is subject to change without notice and Nomaco assumes no liability for use of or reliance upon this document. SDS sheets are intended for occupational use only. This information does not constitute a license under any patent or other proprietary right.