

# MATERIAL SAFETY DATA SHEET

Stenidy Industries, Inc.

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ThermaGon EXL series

MSDS Date: 1/1/2007

(Includes EXL 0145, EXL 0500)

Product Family: Non-halogenated, chemically crosslinkable flame-retardant polyolefin compound.

Product Description: Opaque white pellets.

Stenidy Industries, Inc.  
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Emergency Telephone (317) 873-5343

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Proprietary non-halogenated polyolefin-based flame-retardant compound containing metal hydrate filler and additives. This product does not contain 0.1% or more of any chemical listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the United States Occupational Safety and Health Administration (OSHA) as a carcinogen.

<u>Composition</u>	<u>CAS No.</u>	<u>Range in %</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polyolefin Copolymers	Trade Secret	20 - 60	None Established	
Metal Hydrate	Trade Secret	0 - 80	None Established	
Organic Peroxide	25155-25-3 9010-79-1	0 - 2.0	None Established	
		1,3- and 1,4-Di (2-tert-butylperoxyisopropyl) benzenes. This component is hazardous under the criteria of the OSHA Hazard Communications Standard 29 CFR1910.1200.		
Other Components	Trade Secret	0 - 15.0	None established	

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

MIXTURE OF POLYOLEFIN RESINS AND METAL HYDRATE FILLER WITH SLIGHT ODOR. EXPOSURE TO TEMPERATURES ABOVE 300 °F MAY CAUSE PRODUCT TO CHEMICALLY CROSSLINK INTO A THERMOSET PLASTIC.

PROLONGED OR REPEATED CONTACT TO THIS PRODUCT MAY CAUSE SKIN IRRITATION.

AVOID CONTACT OF PARTICULATES AND DUST PARTICLES WITH EYES.

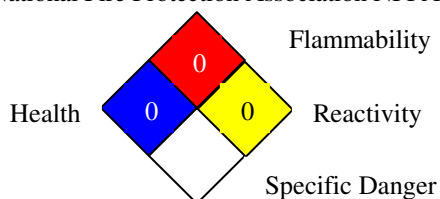
AVOID BREATHING DUST PARTICULATE.

SPILLED PELLETS SHOULD BE PICKED UP AND DISPOSED OF PROPERLY.

Hazardous Material Identification System (Unites States)

National Fire Protection Association NFPA (United States)

Health	0
Flammability	0
Reactivity	0
Personal Protection	



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## 3. HAZARDS IDENTIFICATION (CONT.)

Appearance: Off white solid pellets.

Odor: Slight peroxide or paraffin-like odor.

Potential Health Effects:

Acute:

Eye: Avoid direct contact. Particulates may scratch eye surfaces and cause irritation.

Skin: Exposure to hot material may cause thermal burns. May cause mild skin irritation.

Ingestion: Do not ingest. This product is relatively non-toxic by ingestion.

Inhalation: If inhaled as a powdered material, may cause mild respiratory tract irritation. Vapors that may be given off at elevated temperatures may be irritating to eyes and respiratory tract.

Chronic: Prolonged or repeated inhalation of dust or particulates may impair lung function or cause lung damage.

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## 4. FIRST AID MEASURES

Eyes: If in eye, remove as one would remove any foreign object. Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

Skin: Wash with soap and water. Pellets may cause slight skin irritation if skin contact is repeated or prolonged. If exposed to hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean bandage and get prompt medical attention.

Ingestion: Ingestion of pellets may be irritating to digestive tract. If conscious, drink large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Inhalation: In case of adverse exposure to vapors released at elevated temperatures, move victim to fresh air to avoid vapors. If victim has stopped breathing, give artificial respiration and seek immediate attention.

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## 5. FIRE FIGHTING MEASURES

Flammable Properties:

Flash point: Not applicable.

Autoignition temperature: Not applicable.

Flammable limits: Not applicable.

Hazardous Combustion Products: If combusted at elevated temperatures, solid product will form gases such as hydrocarbons and carbon monoxide. Water vapor will be given off at temperatures above 400 °F.

Extinguishing media: Foam, carbon dioxide, dry chemical or water spray may be used as extinguishing media.

Fire Fighting Instructions: Use water stream to cool fire exposed surfaces, protect personnel and extinguish fire. Respiratory and eye protection should be worn by fire fighting personnel.

Unusual Fire and Explosion hazards: If sufficient quantity of finely divided dust is mixed with air and exposed to high temperature ignition source, product may burn in open air. Dust from handling product should be kept to a minimum.

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## 6. ACCIDENTAL RELEASE MEASURES

Land Spill: Recover spilled pellets and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Water Spill: Plastic pellets are defined by the US EPA under the Clean Water Act (40 CFR 122.26) as a "significant material" which requires any industrial plant that may expose pellets to storm water to secure a storm water permit. Violations of the rule carry the same penalties as other Clean Water Act violations. Pellets found in storm water runoff are subject to EPA regulations with the potential for substantial fines and penalties. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. Recover the spilled material and place in suitable containers for recycle or disposal.

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## 7. HANDLING AND STORAGE

Handling Conditions: Use good industrial hygiene practices. Do not swallow. Avoid breathing dust particulate. Use adequate ventilation. Keep water and moisture away from product to ensure best performance of product.

Storage Conditions: Store in a dry place away from moisture and excessive heat. Storage temperatures should not exceed 110 ° F. Avoid static charge problems in pouring the pellets into a metallic container. Assure proper electrical grounding of all handling equipment. Maintain good housekeeping standards to prevent accumulation of dust.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Provide adequate ventilation where heat can cause product to crosslink into a thermoset state. Avoid excessive heat which may cause polyolefin resin to break down, such as during extrusion of product. Local exhaust ventilation may be necessary for some operations where there is a need to draw dusts and vapors from worker breathing zones.

Personal protection:

Eye/Face: Wear safety glasses with side shields. Heat resistant face shield recommended when handling hot material.

Skin: Wear clean body covering and gloves impervious to dust to minimize skin contact. Where contact may occur with hot material, wear thermal resistant gloves, arm protection and a face shield.

Respiratory: Airborne concentrations should be kept to lowest levels possible. For conditions where exposure to dust and vapors is apparent, a NIOSH approved respirator for dust mists and fumes appropriate to the airborne concentration should be worn.

Ventilation: Provide adequate ventilation where heat can cause polyolefin resin to break down, e.g. extrusion. Local exhaust ventilation may be necessary for some operations where there is a need to draw dusts and vapors from worker breathing zones.

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## 9. PHYSICAL PROPERTIES AND CHEMICAL PROPERTIES

Physical state: Off-white solid pellets.

Odor: Very slight odor.

Boiling point: Not applicable.

Melting point: 160 - 200 °F.

Vapor pressure (mm Hg): Not applicable.

Vapor density (air = 1): Not applicable.

Specific Gravity (water = 1): Approximately 1.4.

Water solubility: Insoluble.

Evaporation rate (Butyl acetate = 1): Not applicable.

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## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended handling and storage conditions. Peroxide in product will activate if product is heated above 300 °F, causing product to crosslink into a thermoset state. Compound will release water vapor if heated above 400 °F.

Conditions to Avoid: Decomposition of material during thermal processing. Avoid heating product above 280 °F during extrusion to prevent product from crosslinking inside the extruder.

Incompatibility with Other Materials (Materials to Avoid): Acids, strong oxidizing agents and reducing agents.

Hazardous Polymerization: Does not occur.

Hazardous Decomposition: Peroxide in product will activate if product is heated above 300 °F. Hydrocarbon fumes and water vapor may be generated if product is excessively heated to combustion.

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## 11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects)

Immediate (Acute) Toxicity: No effects from acute exposure are known.

Chronic Toxicity: No effects from chronic exposure are known.

Skin: The dermal LD50 has not been determined.

Ingestion: The oral LD50 has not been determined.

Mutagenicity (Ability to affect genetic material): No relevant information found.

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## 12. ENVIRONMENTAL INFORMATION

Mobility: Not determined.

Aquatic Toxicity: Not determined.

Potential to Bioaccumulate: No bioconcentration of this polymeric product is expected.

Degradation and Transformation: Not determined. The polymeric product is not expected to biodegrade.

Ecotoxicity: No relevant information found.

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## 13. DISPOSAL INFORMATION

Spill Response: Sweep pellets and dispose of properly. Avoid the generation of dust in the area.

Recommended Disposal: Dispose of as solid waste observing all local, state, and federal regulations.

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## 14. TRANSPORTATION INFORMATION

### U.S Department of Transportation (DOT)

Hazard Class: Not regulated.

Label Required: Not regulated.

Identification number: Not available.

Packing Group: Not regulated.

### TDG

Proper Shipping Name: Not regulated.

Hazard Class: Not regulated.

Identification Number: Not regulated.

Label Required: Not regulated.

### Canadian Regulations

Shipping Description: Not regulated.

WHMIS: Not controlled under WHMIS.

### IMDG

Proper Shipping Name: Not regulated.

### ICAO

Proper Shipping Name: Not regulated.

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## 15. REGULATORY INFORMATION

OSHA: This product contains an organic peroxide, (di-[2-t-butylperoxyisopropyl]-benzene, which is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

CERCLA 102(a)/DOT Hazardous Substances: If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III, Section 311/312: This product contains an organic peroxide, (di-[2-t-butylperoxyisopropyl]-benzene, which is classified as a SARA Acute Health Hazard, a SARA Fire Hazard, and a SARA Reactive Hazard.

SARA TITLE III, Sections 302, 304: This product and the components of this product are not considered hazardous according to the EPA Hazard categories defined by SARA Title III, Sections 302, 304.

USA TSCA Inventory Status: All components of this product are listed in the TSCA Inventory of Chemical Substances, or are exempt from listing.

Canadian DSL: All of the components of this product are listed on the Canadian Domestic Substances List.

European – EINECS: All of the components of this product are listed on EINECS, or are exempt from listing.

Japanese Chemical Inventory: All of the components of this product are listed on the JPENCS inventory.

Australian Chemical Inventory: All of the components of this product are listed on the Australian Chemical Inventory.

Korean Chemical Inventory: All of the components of this product are found on the Korean Existing Chemical Substances List.

Philippines Chemical Inventory: All of the components of this product are found on the Philippines Inventory.

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## 16. OTHER INFORMATION

Avoid accumulation of dust or dust clouds. Practice good housekeeping and keep all handling and storage systems properly maintained.

Product may contain varying levels of additives, such as antioxidants, stabilizers, corrosion inhibitors, and polymer lubricants.

Date Issued: 1-1-2007

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