

MSDS No: 6029
Forbo Adhesives, LLC

Box 110447
Research Triangle Park, NC 27709-0447

ALL CHEMICAL EMERGENCIES
1-800-424-9300

Effective Date: 10/10/02

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1. PRODUCT IDENTIFICATION

Trade Name: HELMITHERM 43362
Chemical Family: Thermoplastic mixture
Intended Use: Hot melt adhesive

NFPA Hazard Classification

Health Hazard: 1
Fire Hazard: 1
Reactivity: 0
Special Hazard:

HMIS Hazard Classification:

Health: 1 Slight Hazard
Flammability: 1 Slight Hazard
Reactivity: 0 Minimal Hazard
Personal Protection:

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS No.	Name	ACGIH TLV		OSHA PEL	AMOUNT
		TWA	STEL		
Proprietary	Polymer Solids	NE	NE	NE	20.00 - 30.00
Proprietary	Tackifying resin(s)	NE	NE	NE	20.00 - 30.00
Proprietary	Polyolefins	NE	NE	NE	50.00 - 60.00
Proprietary	Wax(es)	NE	NE	NE	1.00 - 10.00

Refer to Section 8, Subheading "Exposure Guidelines", for additional information concerning exposure limits.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Yellow Solid at room temperature. Slightly Resinous odor. Direct contact when this material is in a molten (heated liquid) state will cause deep serious burns to eyes and skin. Do not use this material if it is wetted or mixed with water. Water will boil at glue-pot temperatures and cause dangerous spattering of molten material. Static electric charges created by emptying product from ungrounded containers in or near flammable vapors may cause flash fire.

Route(s) of Entry:

Inhalation, skin and eye contact.

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Acute Exposure:

EYES: Vapor that is released from this material when it is heated may cause mild eye irritation. Direct contact with molten (heated) material will cause severe thermal burns to the eyes. SKIN: Contact with this material in a molten (heated) state may cause severe burns. INHALATION: Vapors and/ or aerosols may be formed at elevated temperatures. Inhalation of these may cause irritation to the respiratory tract (nose, throat, and lungs). INGESTION: Ingestion is not an anticipated route of exposure for this material in industrial use.

Chronic Exposure:

Prolonged or repeated over-exposure may cause lung damage.

Carcinogenicity:

This material 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 Occupational Safety and Health Administration (OSHA) as a carcinogen.

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4. FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with large quantities of clean water for at least minutes. Get immediate medical attention.

SKIN Contact:

For contact with hot material, immediately immerse the exposed skin area in large amounts of cold water (or flush the skin area with cold water) to dissipate heat. Do not remove material from skin and do not remove clothing. Cover affected area with clean sheeting or gauze. IMMEDIATELY SEEK MEDICAL ATTENTION.

Ingestion:

Give the victim one or two glasses of water or milk to drink. Never give anything by mouth to an unconscious person. IMMEDIATELY SEEK MEDICAL ATTENTION.

Inhalation:

Remove victim to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. GET IMMEDIATE MEDICAL ATTENTION.

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5. FIRE FIGHTING MEASURES

Flash Point: > 400 degrees F (> 204 degrees C)
Flash Point Method Used: SetaFlash Closed Cup
Flammable Limits in Air (Lower): Not available
Flammable Limits in Air (Upper): Not available
Autoignition: Not available

General Hazards:

Static electric charges created by emptying product from ungrounded containers in or near flammable vapors may cause flash fire.

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Fire Fighting Extinguishing Media:

Use carbon dioxide, foam, dry chemical or water fog to extinguish fire. Do not use water stream or spray on a localized glue pot fire. Water stream or spray may damage nearby energized electrical conductors or conduct electrical energy and present a hazard to personnel and other equipment.

Fire Fighting Equipment:

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use.

Fire Fighting Instructions:

Do not use water stream or spray on a localized glue pot fire. Water stream or spray may damage nearby energized electrical conductors or conduct electrical energy and present a hazard to personnel and other equipment. See Section 13 for disposal considerations.

Fire and Explosion Hazards:

When this material is unloaded from a multi-wall paper bag with a polyethylene or foil lining, an electrostatic charge can accumulate and cause a spark that is sufficient to ignite flammable or combustible vapors.

Hazardous Combustion Products:

Combustion may produce carbon monoxide, carbon dioxide and irritating or toxic vapors and gases.

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6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Prevent spilled material from 1) contaminating soil, 2) entering sanitary sewers, storm sewers, and drainage systems, and 3) entering bodies of water or ditches that lead to waterways. If the material is molten (hot), allow it to cool and solidify, scrape it up, and place it in a chemical waste container. See Section 13 for disposal considerations.

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7. HANDLING AND STORAGE

Signal Word:

C A U T I O N

Handling Information:

Avoid breathing vapor from heated material. Avoid contact with eyes, skin, and clothing. Do not use this material if it is wetted or mixed with water. Water will boil at glue-pot temperatures and cause dangerous spattering of molten material. Wash hands thoroughly after handling and before eating or drinking. Remove and wash contaminated clothing before reuse. Minimize dust generation and accumulation. Ground and bond containers when transferring the material to prevent static electricity sparks. Use with adequate ventilation. An eyewash station and a safety shower should be readily accessible to workers wherever this material is stored or used.

Storage Information:

Store in a dry area. Keep container closed when not in use.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

The Occupational Safety and Health Administration (OSHA), has established for inert or nuisance dusts, a Permissible Exposure Limit (PEL) of 15 mg/m³, total dust or 5 mg/m³, respirable fraction for an 8 hour Time Weighted Average (TWA) as Particulates Not Otherwise Regulated (PNOR). The American Conference of Governmental Industrial Hygienists (ACGIH) have established, for inert or nuisance dusts, Threshold Limit Values (TLV) of 10 mg/m³ for inhalable (total) particulate and 3 mg/m³ for respirable particulate based on Particulates Not Otherwise Classified (PNOC).

Engineering Controls:

Use general ventilation to maintain airborne concentrations to levels that are below regulatory and recommended occupational exposure limits. See occupational exposure limits in Section 2. Local ventilation may be required during certain operations.

Eye Protection:

Wear safety glasses with side shields or goggles. Wear face shield in operations where hot material may splash or spatter.

Skin Protection:

When material is heated, wear gloves that protect the hands from thermal burns. Long-sleeved shirts are recommended to protect against potential splashes of molten material. Consult your supplier of personal protective equipment for additional instructions on proper usage.

Respiratory Protection:

Respiratory protection is not generally required during normal use and handling. The need for respiratory protection should be evaluated if this material is sprayed or heated in poorly ventilated areas. A NIOSH/MSHA approved air-purifying particulate filter respirator may be required under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Protection provided by air purifying respirators is limited. Use a positive pressure air-supplied respirator if 1) there is any potential for an uncontrolled release, 2) exposure levels are not known, or 3) during other circumstances where air purifying respirators may not provide adequate protection. See Section 2 and 8 for applicable occupational exposure limits.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pellet
Color:	Yellow
Odor:	Slight resinous
Odor Threshold:	Not available
Physical State:	Solid at room temperature

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Solubility in Water: Insoluble
Viscosity: 14000 - 18000 cps at 180 degrees C (356 degrees F)-
Vapor Pressure: Not available
Specific Gravity: 0.99 - 1.01 (Water = 1) at 26 degrees C (79 degrees F)
Boiling Point: Not available
Melting Point: 140 - 158 degrees C (284 - 316 degrees F)
Freezing Point: Not available
Evaporation Rate: Negligible
Vapor Density: Not available
% Volatile: Non-volatile
pH: Not applicable
Coefficient of water/oil: Not available

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10. STABILITY AND REACTIVITY

Stability:

This material is stable during storage and during its intended use.

Incompatibility:

Avoid contact with oxidizing materials such as peroxides, chlorates, and manganates. Avoid contact with acids such as hydrochloric acid, sulfuric acid, and nitric acid. Avoid contact with bases such as sodium hydroxide, ammonium hydroxide, and organic amines. Avoid contact with reducers.

Hazardous Decomposition Products:

Thermal decomposition may form: carbon monoxide, carbon dioxide, and various hydrocarbons.

Hazardous Polymerization:

Hazardous polymerization will NOT occur.

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11. TOXICOLOGICAL INFORMATION

Acute Eye Toxicity:

No information is available.

Acute Skin Toxicity:

No information is available.

Acute Inhalation Toxicity:

No information is available.

Acute Oral Toxicity:

No information is available.

Chronic/Carcinogenicity:

This material 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.

Additional Information:

toxicological information is available on this material.

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12. ECOLOGICAL INFORMATION

Ecotoxicity:

No information is available.

Environmental Fate:

No information is available.

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Not a RCRA hazardous waste. Disposal of this material is not regulated under RCRA. Consult federal, state and local regulations to ensure that this material and its containers, if discarded, is disposed of in compliance with all regulatory requirements.

RCRA Hazard Class:

NOT A RCRA HAZARDOUS WASTE: When discarded in its purchased form, this material would not be regulated as a RCRA Hazardous waste under 40 CFR 261.

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14. TRANSPORT INFORMATION

DOT / IATA / IMDG / TDG:

Bulk and Non-Bulk

Proper Shipping Name:

NOT REGULATED

Label:

Placard:

Marine Pollutant:

ERG Number:

Reportable Quantity:

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15. REGULATORY INFORMATION

Occupational Safety and Health Act (OSHA):

This material is not classified as hazardous under the criteria of the US Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III: Section 304 - CERCLA:

Components of this product are not subject to reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

SARA Title III: Section 311/312 - Hazard Communication Standard (HCS):

This material is not a hazardous chemical.

Title III: Section 313 Toxic Chemical List (TCL):

This product does not contain any chemicals for routine annual toxic

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chemical release reporting under Section 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status:

All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory.

TSCA Section 12(b) - Export Notification:

This material does not contain any components that are subject to the US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification requirements.

Canadian WHMIS:

This material is not classified as a controlled product under the Canadian Workplace Hazardous Material Information System.

California Proposition 65:

This product is not known to contain any chemicals listed by the State of California (Safe Drinking Water and Toxic Enforcement Act of 1986) to cause cancer or reproductive toxicity.

Additional Canadian Regulatory Information:

This product does not contain a substance present on the WHMIS Ingredient Disclosure List (IDL) which is at or above the specified concentration limit.

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1st OTHER INFORMATION

MSDS No: 6029
Reason Issued: New Issue
Prepared By: Product Safety & Compliance Department

Disclaimer:

This information is provided in good faith and is correct to the best of Reichhold's knowledge as of the date hereof and is designed to assist our customers; however, Reichhold makes no representation as to its completeness or accuracy. Our products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to suitability for their specific applications. Any use which Reichhold customers or third parties make of this information, or any reliance on, or decisions made based upon it, are the responsibility of such customer or third party. Reichhold disclaims responsibility for damages, or liability, of any kind resulting from the use of this information. THERE ARE NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT IT DESCRIBES. IN NO EVENT SHALL REICHOLD BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.