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## SAFETY DATA SHEET

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### 1. IDENTIFICATION AND EMERGENCY INFORMATION

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**PRODUCT NAME:** RAM 327 HDR

**MANUFACTURER:** Barrett Company, Inc.  
33 Stone House Road  
Millington, New Jersey 07946

**CHEMTREC EMERGENCY NUMBER:** 800-424-9300  
**INFORMATION PHONE:** (908) 647-0100  
**DATE PREPARED:** 11/9/2010

**RECOMMENDED USE:** A component part of commercial waterproofing and roofing systems

**RESTRICTIONS ON USE:** Should only be used by a Barrett Approved Contractor

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### 2. HAZARDS IDENTIFICATION

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#### Emergency Overview

This compound has not been tested in its present form and is not expected to pose a significant health hazard when normal industrial hygiene practices are followed. Information provided on physical and health effects of this product is based on individual components. All ingredients are bound in the compound matrix, and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon processing; therefore necessary precautions (mechanical, ventilation, respiratory, etc.) to protect employees must be assessed.

#### Physical Hazards Based on Raw Materials (none if blank):

Combustible. May form explosive dust-air mixture. Hot vapors from heated material can be extremely flammable in air or oxygen in the case of stoichiometric mixtures.

Sensitivity to static discharge is expected.

Slightly combustible.

Take measures to prevent buildup of electrostatic charge; some grades of carbon black are electrically non-conductive enough to allow a build-up of a static charge. Water may spread fire by floating ignited dust.

When transferring material into flammable solvents, use proper grounding to avoid electrical sparks. May form explosive dust-air mixture.

#### Health Hazards Based on Raw Materials (none if blank):

Contact with heated material may cause thermal burns.

Calcining, which may result in crystalline formation, or mixing with additives may alter toxicological properties.

Ingestion may cause pain, nausea, vomiting, thirst and diarrhea.

Pre-existing eye, skin or lung disease may be aggravated by exposure. May be toxic by ingestion.

Ingestion may irritate the GI tract and cause renal injury. Preexisting conditions that may be affected are asthma, chronic pulmonary disease and skin lesions.

May cause alcohol intolerance (Antabuse) through ingestion. Harmful if swallowed. May be an inhalation hazard.

Prolonged or repeated exposure may cause lung damage based on animal data.

Slight ingestion hazard.

Target organ: Lungs. May be harmful if swallowed.

**Irritation:** May cause eye, skin, digestive tract and respiratory irritation.

**Sensitivity:** Possible skin sensitization

**Toxicity:** May be toxic by ingestion

**Primary Route(s) of Exposure:** Skin, Eyes, and Inhalation.

**Acute Overexposure Based on Raw Materials (none if blank):**

**Other:**

TMTM may cause alcohol (Antabuse) through ingestion.

May cause mild irritation in people with sensitive skin. Long-term overexposure of talc may lead to chronic lung disease with impaired lung function and abnormal chest x-rays.

Inhalation of dust may be an irritant to preexisting respiratory conditions and may cause metal fume fever. Binder component causes dermatitis.

Excessive dust can cause transitory upper respiratory irritation.

Chloronaphthalenes may cause skin irritation and sensitization and "chloracne." Ingestion may cause abdominal pain.

**Chronic Overexposure Based on Raw Materials (none if blank):**

Repeated, prolonged exposure may cause sensitization of (if checked): Skin X Respiratory

Repeated, prolonged exposure may result in metal fume fever and oxide pox.

Repeated and prolonged contact may cause an allergic skin reaction in sensitive individuals.

Overexposure to TMTM may affect the blood.

May cause industrial bronchitis, reduce breathing capacity, and lead to increased susceptibility to other lung disease.

Long term exposure below the current occupational exposure limit of 3.5 mg/m<sup>3</sup> (when measured as "total" dust) may result in a small loss in one aspect of lung function (FEV1). Prolonged or repeated inhalation of dust may result in symptoms of bronchitis.

Excessive or prolonged and repeated contact and poor hygiene conditions may result in dryness, dermatitis, erythema, oil acne, cracking and defatting of the skin.

**Medical Condition(s) Prone to Aggravation:** Skin conditions

**3: COMPOSITION / INFORMATION ON INGREDIENTS**

**HMIS Ratings:** (0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe)

Health 2\* Flammability 1 Reactivity 0 PPE X (Consult Supervisor)

**Exposure Limits** (none if blank)

Chemical Name	CAS#	ACGIH TLV	OSHA PEL
Hydrocarbon rubber		dienes: 25 mg/m <sup>3</sup> Ceiling	5 mg/m <sup>3</sup> TWA (respirable dust), 15 mg/m <sup>3</sup> (total dust)
Amorphous Precipitated Silica	112926-00-8	10 mg/m <sup>3</sup> TWA (total dust)	6 mg/m <sup>3</sup> TWA (total dust)
Carbon Black	1333-86-4	3.5 mg/m <sup>3</sup> TWA (total)	3.5 mg/m <sup>3</sup> TWA (total)
Chloroprene		10 ppm TWA	
Talc		2 mg/m <sup>3</sup> TWA (respirable fraction)	
Magnesium Oxide	1309-48-4	5 mg/m <sup>3</sup> TWA (respirable particulate), 10 mg/m <sup>3</sup> (total particulate)	5 mg/m <sup>3</sup> TWA, 15 mg/m <sup>3</sup> (total particulate)
Mercaptobenzothiazole disulfide (MBTS)	120-78-5	10 mg/m <sup>3</sup>	
Paraffin Wax	64742-43-4	2 mg/m <sup>3</sup> (fumes)	2 mg/m <sup>3</sup> (fumes)
Sulfur	7704-34-9	10 mg/m <sup>3</sup> TWA	15 mg/m <sup>3</sup>
Zinc Oxide		2 mg/m <sup>3</sup> TWA, 10 mg/m <sup>3</sup> STEL (dust)	5 mg/m <sup>3</sup> (respirable), 15 mg/m <sup>3</sup> (total dust)

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**FIRST AID MEASURES**

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**Eyes:** Rinse with plenty of water. Seek medical attention. If irritation persists.

**Ingestion:** Rinse with plenty of water. Seek medical attention.

**Inhalation:** Remove to fresh air. Seek medical attention if irritation occurs.

**Skin:** Wash with soap and water. Seek medical attention. If irritation persists.

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**FIRE FIGHTING MEASURES**

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**Extinguishing Media:** Water fog, foam, carbon dioxide, or dry chemical

**Unusual Fire and Explosion Hazards (none if blank):** Fire involving rubber is accompanied by the evolution of an acrid black smoke.

**Fire Fighting Protective Equipment:** A self-contained breathing apparatus (SCBA) in positive pressure mode and full fire-fighting protective gear should be worn when fighting fires.

**Special Fire Fighting Procedures (none if blank):**

**Flash Point Information (minimum of available raw material flash points):** 78°C (Polybutylated Bisphenol A)

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**ACCIDENTAL RELEASE INFORMATION**

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**Spill Cleanup:** Sweep up by mechanical means.

**Waste Disposal:** Put into proper containers and dispose of in accordance with all local, state and federal regulations.

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**HANDLING AND STORAGE**

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**Storage Conditions:**

Store in a cool dry environment in original packaging.

Do not store at high temperatures or near strong acids and oxidizers.

**Handling:** Persons handling equipment should wear protective equipment specified in Section 8. Good housekeeping and hygienic practices should be observed. Avoid heat, sparks and flame.

**Other Handling Storage Comments (none if blank):**

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**EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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**Gloves:** Impervious Gloves

**Eye Protection:** Safety Glasses

**Clothing:** Long sleeved shirt and long pants.

**Respiratory:** A NIOSH/MSHA approved respirator above PEL or TLV or as necessary.

**Special Plant Equipment:** Eye bath and safety showers in immediate area.

**Hygienic Practices:** Wash after handling product. After work, cloths should be changed and washed before reuse. Do not smoke, eat or use alcohol while handling product.

*Polymer bound products preclude exposure to powder, dust-related, mechanical contact hazards. Fumes and vapors at processing temperatures may cause irritation to the eyes, skin, nose, throat and respiratory tract. With inadequate ventilation, nausea, dizziness or headaches are possible.*

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**9: PHYSICAL & CHEMICAL PROPERTIES**

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No information available.

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**10: STABILITY AND REACTIVITY**

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**Stability/Polymerization:** The finished product is stable; hazardous polymerization will not occur.

**Raw Material Component Stability and Polymerization Comments:**

Avoid temperatures greater than 211° F. Toxic and explosive if more than 3.3% volume in air.

Ground all equipment.

May be converted to crystalline silica when heated above 950°C.

May polymerize at temperatures >400°F.

MBTS is thermally stable to 260°C.

Reacts violently with magnesium, linseed oil.

TMTM may react with nitrosating agents to form nitrosamines – suspect carcinogens.

**Incompatibility:** Strong oxidizers

**Hazardous Decomposition Products:**

Oxides of (if checked):

CO<sub>x</sub> X

NO<sub>x</sub> X

SO<sub>x</sub> X

**Other:**

Acids, ketones, aldehydes, organic oxidation products

Butadiene

Diisobutylene and triisobutylene

Hydrogen Chloride, Chloroprene

Hydrogen Sulfide

Oxides of Zinc

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**11: TOXICOLOGICAL INFORMATION**

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**Toxicity Information (none if blank):**

Amorphous Precipitated Silica

**LD50 (Oral, Rat)**

>15,000 mg/kg

Sulphur (S)

>5,000 mg/kg (rat)

Zinc Oxide (ZnO)

>5,000 mg/kg (rat)

**LC50 (Inhalation, Rat)**

2,500 mg/kg (mouse)

Ethylene polypropylene ethylidene norbornene  
terpolymer rubber

>5000 mg/kg (rat) estimated

732 ppm (4 hour I.C50) – Ethylidene  
norbornene

Carbon black

>8,000 mg/kg (rat)

Mercaptobenzothiazole disulfide

7,940 mg/kg (rat)

Tetramethylthiuram Monosulfide (TMTM)

730-1390 mg/kg

Magnesium Oxide (MgO)

810 mg/kg (mouse)

**Carcinogenic Information (none if blank)**

**Carcinogenic Component:**

**IARC**

**NTP**

**OSHA**

**ACGIH**

Amorphous silica

Group 3

Carbon Black contains <0.1% solvent extractable  
polycyclic aromatic hydrocarbons (PAHs)

Group 2B

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**12: ECOLOGICAL INFORMATION (none if blank)**

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**Clean Water Regulations:**

**Clean Air Regulations:**

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**13: DISPOSAL CONSIDERATIONS**

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**Disposal Method:** Dispose of product or empty containers in accordance with local, state and federal regulations.

**RCRA Regulated Components (none if blank):**

**Superfund Reportable Quantity Chemicals, 40 CFR Sec. 302.4 (none if blank):** *Zinc and compounds*

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**14: TRANSPORTATION**

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**DOT/TDG:** None.

**IATA (Air):** Carbon black, non-activated, mineral origin.

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**15: REGULATORY INFORMATION**

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**TSCA:** All ingredients listed.

**SARA TITLE III (none if blank):**

Section 302 Extremely Hazardous Substances, 40 CFR Part 355:

Section 313 Toxic Chemicals, 40 CFR Sec. 37:

<u>Regulated Chemical</u>	<u>% in Compound</u>
Zinc Compounds	1-5%

**TSCA Preliminary Assessment Information Reporting, 40 CFR Sec. 712 (none if blank):**

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**16: OTHER INFORMATION**

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**Date Prepared:** 11/9/2010

**Abbreviations:** ND – Not determined, NA – Not Applicable, NE – Not established.

**References:**

Code of Federal Regulations, Transportation (49 CFR Parts 100 to 185, October 2000), NIOSH Pocket Guide to Chemical Hazards (June 1997), HMIS Implementation Manual (2<sup>nd</sup> Edition), ChemCheck Handbook, Specialty Technical Publishers, IARC website, NTP website.

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