

Material Safety Data Sheet

RD-6™ 170

1. Product and company identification

Product name : RD-6™ 170
Material uses : Polymer modified bitumen tape used to protect pipes from exterior corrosion.
Supplier/Manufacturer : Polyguard Products
3801 South Interstate 45
Ennis, TX 75119
Tel: (800)541-4994
Responsible name : Atrion Regulatory Services, Inc.
In case of emergency : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887

2. Hazards identification

Physical state : Solid adhesive layer attached to a dark rust colored geotextile.
Solid at room temperature.

Odor : Asphalt. [Slight]

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : CAUTION!
MAY CAUSE RESPIRATORY TRACT AND EYE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Avoid exposure - obtain special instructions before use. Wash thoroughly after handling.

Routes of entry : Dermal contact.

Potential acute health effects

Inhalation : Slightly irritating to the respiratory system if product is heated to a molten station.

Ingestion : No known significant effects or critical hazards.

Skin : Slightly irritating to the skin.

Eyes : Slightly irritating to the eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: skin.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3 . Composition/information on ingredients

United States

Name	CAS number	%
petroleum Bitumen	8052-42-4	60 - 100

Canada

Name	CAS number	%
petroleum Bitumen	8052-42-4	60 - 100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Extinguishing media**
 - Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
 - Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 - carbon dioxide
 - carbon monoxide
 - sulfur oxides
 - low MW hydrocarbons
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No special measures required.
- Environmental precautions** : No special requirements.
- Methods for cleaning up** : Due to the physical nature of this product, spills are not possible.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Do not store in unlabeled containers.

8. Exposure controls/personal protection

<p>Product name petroleum Bitumen</p>	<p style="text-align: center;">United States</p> <p>Exposure limits ACGIH TLV (United States, 1/2008). TWA: 0.5 mg/m³ 8 hour(s). Form: Fume NIOSH REL (United States, 6/2008). CEIL: 5 mg/m³ 15 minute(s). Form: Fume</p>
<p>Product name petroleum Bitumen</p>	<p style="text-align: center;">Canada</p> <p>Exposure limits CA Quebec Provincial (Canada, 6/2008). TWAEV: 5 mg/m³ 8 hour(s). Form: Fume CA Ontario Provincial (Canada, 6/2008). TWAEV: 0.5 mg/m³, (as benzene soluble aerosol) 8 hour(s). CA British Columbia Provincial (Canada, 6/2008). TWA: 0.5 mg/m³ 8 hour(s). Form: Inhalable fume CA Alberta Provincial (Canada, 6/2008). TWA: 5 mg/m³ 8 hour(s). Form: Fume 8 hrs OEL: 5 mg/m³ 8 hour(s).</p>

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

8 . Exposure controls/personal protection

- Respiratory** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this necessary.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Solid adhesive layer attached to a dark rust colored geotextile. Solid at room temperature.
- Flash point** : Not available.
- Color** : Black.
- Odor** : Asphalt. [Slight]
- Specific gravity** : 1.09
- VOC** : Not available.
- Solubility** : Insoluble in water. Soluble in Ketones and aromatic solvents.

10 . Stability and reactivity

- Stability** : The product is stable.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

- Acute toxicity**
- Inhalation** : Slightly irritating to the respiratory system if product is heated to a molten station.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : Slightly irritating to the skin.
- Eyes** : Slightly irritating to the eyes.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
petroleum Bitumen	A4	3	-	+	-	-

12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.
- Other adverse effects** : No known significant effects or critical hazards.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

AERG : Not applicable.

Regulatory information

DOT/ TDG / IMDG/ IATA : Not regulated.

15 . Regulatory information

United States

HCS Classification : Target organ effects

U.S. Federal regulations : TSCA 8(a) PAIR: 1-Cyclohexene, 4-vinyl-
United States inventory (TSCA 8b):All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substancesNo products were found.

SARA 302/304 emergency planning and notificationNo products were found.

SARA 302/304/311/312 hazardous chemicals petroleum Bitumen; Benzene, ethenyl-, polymer with 1,3-butadiene

SARA 311/312 MSDS distribution - chemical inventory - hazard identification

petroleum Bitumen: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene, ethenyl-, polymer with 1,3-butadiene: Immediate (acute) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Formaldehyde

Clean Air Act (CAA) 112 accidental release prevention1,3-Butadiene; Formaldehyde

Clean Air Act (CAA) 112 regulated flammable substances1,3-Butadiene

Clean Air Act (CAA) 112 regulated toxic substancesFormaldehyde

State regulations

: **Connecticut Carcinogen Reporting**:None of the components are listed.

Connecticut Hazardous Material Survey:None of the components are listed.

Florida substances:None of the components are listed.

Illinois Chemical Safety Act:None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act:None of the components are listed.

Louisiana Reporting:None of the components are listed.

Louisiana Spill:None of the components are listed.

Massachusetts Spill:None of the components are listed.

Massachusetts Substances:The following components are listed: petroleum Bitumen

Michigan Critical Material:None of the components are listed.

Minnesota Hazardous Substances:None of the components are listed.

New Jersey Hazardous Substances:The following components are listed: petroleum Bitumen

New Jersey Spill:None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act:None of the components are listed.

New York Acutely Hazardous Substances:None of the components are listed.

New York Toxic Chemical Release Reporting:None of the components are listed.

Pennsylvania RTK Hazardous Substances:The following components are listed: petroleum Bitumen

Rhode Island Hazardous Substances:None of the components are listed.

15 . Regulatory information

California Prop. 65 : No products were found.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Formaldehyde	Yes.	No.	Yes.	No.
1-Cyclohexene, 4-vinyl-	Yes.	No.	No.	No.
1,3-Butadiene	Yes.	Yes.	Yes.	No.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists

: **CEPA Toxic substances:**None of the components are listed.
Canadian ARET:None of the components are listed.
Canadian NPRI:None of the components are listed.
Alberta Designated Substances:None of the components are listed.
Ontario Designated Substances:None of the components are listed.
Quebec Designated Substances:None of the components are listed.

Canada inventory

: All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements : MAY CAUSE RESPIRATORY TRACT AND EYE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.)

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HAZARD RATINGS

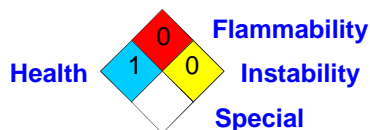
Health	*	1
Fire hazard		0
Physical Hazard		0
Personal protection		B

4- Extreme
 3- Serious
 2- Moderate
 1- Slight
 0- Minimal
 See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

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References

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

Date of issue

: 03/15/2009

Version

: 1

16 . Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.