



MATERIAL SAFETY DATA SHEET

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HE027 - ASPHALT EMULSION FOR DUCTILE IRON PIPE AND FITTINGS

1. Product And Company Identification	
Manufacturer HENRY COMPANY 909 N. Sepulveda Blvd., Suite 650 El Segundo, CA 90245-2724 Company Contact: Technical Services Telephone Number: (800) 486-1278 Web Site: www.henry.com	Manufacturer Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300
Issue Date: 03/04/2007 Supersedes MSDS Dated: 08/22/2006 Product Name: HE027 - ASPHALT EMULSION FOR DUCTILE IRON PIPE AND FITTINGS Product Code: HE027	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
petroleum asphalt	8052-42-4		40 - 70
rosin	8050-09-7		1 - 5
inert ingredients			<Balance>

EMERGENCY OVERVIEW	
CAUTION! May cause respiratory, eye or skin irritation.	
Appearance/Odor: Black liquid, petroleum and wood-like odor	

3. Hazards Identification
Primary Routes(s) Of Entry Skin & Eye Contact, Inhalation
Eye Hazards May cause eye irritation (burning, tearing, redness or swelling).
Skin Hazards May cause skin irritation and contact dermatitis upon prolonged contact.
Ingestion Hazards May be harmful if swallowed in large amounts. May cause gastrointestinal upset, nausea and vomiting.
Inhalation Hazards Exposure to vapors may cause respiratory tract irritation.
Chronic/Carcinogenicity Effects None of the ingredients of this product comprising over 0.1% are classified as carcinogenic according to OSHA, National Toxicology Program (NTP), International Agency for Research on Cancer (IARC) or the American Conference of Governmental Industrial Hygienists (ACGIH).

4. First Aid Measures
Eye In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

VOC=0

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4. First Aid Measures - Continued

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water.

Ingestion

Get medical attention immediately. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious victim.

Inhalation

Remove the person from the contaminated area to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point: >212 °F

Flash Point Method: closed cup

Lower Explosive Limit: not available

Upper Explosive Limit: not available

Fire And Explosion Hazards

Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Extinguishing Media

Chemical foam, carbon dioxide (CO₂), or dry chemical.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect and dispose in accordance with applicable regulations. Avoid runoff to waterways and sewers.

7. Handling And Storage

Handling And Storage Precautions

Keep containers tightly closed. Store in a cool, dry, well-ventilated area. Protect from extreme temperatures. KEEP FROM FREEZING. Do not handle or store near heat, strong oxidants or strong acids.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate general and local exhaust ventilation. When used outdoors, stay well away from building air intakes or close and seal the intakes to prevent product from entering building.

Eye/Face Protection

Chemical splash goggles or faceshield over safety glasses or goggles recommended.

Skin Protection

Use with chemical-protective gloves to prevent skin contact.

Respiratory Protection

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge and particulate filter or supplied air respirator.

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8. Exposure Controls/Personal Protection - Continued

Respiratory Protection - Continued

Occupational Exposure Limits for individual ingredients (if available) are listed below.

Ingredient(s) - Exposure Limits

petroleum asphalt

ACGIH TLV-TWA 0.5 mg/m3 (inhalable fraction, as benzene-soluble aerosol)

rosin

ACGIH TLV-TWA 10 mg/m3 (total dust)

ACGIH TLV-TWA 3 mg/m3 (respirable dust)

OSHA PEL-TWA 15 mg/m3 (total dust)

OSHA PEL-TWA 5 mg/m3 (respirable dust)

9. Physical And Chemical Properties

Appearance

Black Liquid

Odor

Petroleum and Wood-Like Odor

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: 212 °F

Specific Gravity: 1.03

Percent Volatiles: 45.2

Vapor Pressure: 20@77°F

Vapor Density: >1

pH Factor: 10.5-11.5

Solubility: dispersible

Evaporation Rate: <1

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials

Avoid contact with strong oxidizing agents and acids.

Hazardous Decomposition Products

Toxic and irritating gases, vapors or fumes of carbon monoxide (CO), carbon dioxide (CO₂).

11. Toxicological Information

Miscellaneous Toxicological Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Ingredient(s) - Toxicological Data

rosin

oral-rat LD50: 7600 mg/kg

dermal-rabbit LD50: >2500 mg/kg



Physical Properties

Appearance Single component liquid	Freezability Do not freeze	Solids by Weight 54.0 – 59.0%
Brookfield Viscosity 500 – 1000 cPs, 2d @ 20 rpm @ 77°F	Maximum VOC 0 calculated	Specific Gravity @77°F (25°C) 1.01 – 1.06
Color Black	Maximum VOS 0 calculated	Type of Emulsion Anionic
Flammability Non-Flammable	pH 10.5 – 11.5	Weight per Gallon 8.4 – 8.8 lbs
Flash Point >212°F (>100°C)	Set to Touch, 77°F (25°C), 60% R.H. 10-20 minutes (4 mils)	

Approvals and Certifications

HE027 – ASPHALT EMULSION FOR DUCTILE IRON PIPE AND FITTINGS meets the performance requirements of ANSI/AWWA C104/21.4 -95 Cement-Mortar Lining for Ductile-iron Pipe and Fittings for Water.

NSF: Certified in accordance with ANSI/NSF Standard 61 for potable water applications (for pipe 3 inches or greater in diameter, valves & fittings 2 inches in diameter or greater, and tanks of 1,000 gallons or more capacity).



Description

HE027 – ASPHALT EMULSION FOR DUCTILE IRON PIPE AND FITTINGS has been specifically developed as a zero VOC, exterior (O.D.) primer/finish for bare ductile iron substrates and as a curing membrane or sealcoat (I.D.) for cement mortar lined ductile iron pipe and fittings.

This product adheres tenaciously to freshly applied cement mortar and acts as an efficient barrier to calcium salts during hydration. Adhesion after 72 hours cure is such that pressure sensitive tape applied to the seal-coated surface and then peeled back will not remove any of the sealcoat film.

Coverage

1 to 2 gallons per 400 sq. ft. Coverage may vary according to the porosity and roughness of the surface. Maximum dry film thickness for potable applications is 4.0 mils.

Application

- Typically airless spray applied to freshly cast cement mortar linings. Allow a minimum of 7 days cure at 77°F (25°C) or greater for potable applications.
- Can be brush, roller, or spray applied when used as a primer/finish on the O.D.

Refer to Manufacturer's APPLICATION GUIDE or contact the manufacturer for detailed recommendation on application of this product.

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Cleanup

Dried emulsion can be cleaned with mineral spirits of D'Limonene. Use care in handling solvents. Remove from skin with waterless hand cleaner and flush with soap and water before emulsion has dried.

Caution

CAUTION! Close container after each use. DO NOT TAKE INTERNALLY! Use protective measures to avoid contact with eyes and skin. If swallowed, CALL PHYSICIAN IMMEDIATELY! In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. In case of accidental injection by power spray equipment, GET MEDICAL ATTENTION IMMEDIATELY! Dispose of container and unused contents in accordance with Local, State and Federal regulations.

KEEP OUR OF REACH OF CHILDREN!

WARNING! This product contains detectable amounts of chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

KEEP FROM FREEZING!

Employers should obtain a copy of the **Material Safety Data Sheet (MSDS)** from the number listed below.

Product Sizes

BULK (GALLONS) (8.46 lb/gal)

5 GALLON (46.2 lb)

270 GALLON (2495 lb)

Limited Warranty

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product – such as weather, workmanship, equipment utilized and prior condition of the substrate – are all beyond our control. We will replace at no charge any product proved to be defective within 12 months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. **DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY: THIS LIMITED WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FOR A PARTICULAR PURPOSE. MANUFACTURER SHALL HAVE NO LIABILITY OF ANY KIND BEYOND PRODUCT REPLACEMENT, INCLUDING FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT OR ANY DELAYS CAUSED BY REPLACEMENT OR OTHERWISE. THIS LIMITED WARRANTY PROVIDES THE PURCHASER'S EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT.**

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12. Ecological Information
No specific information available.

13. Disposal Considerations
Dispose in accordance with applicable federal, state and local government regulations.

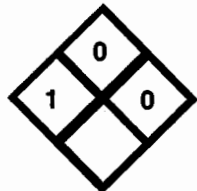
14. Transport Information
Not Regulated

15. Regulatory Information

U.S. Regulatory Information
Asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

Ingredient(s) - State Regulations
petroleum asphalt
New Jersey - Workplace Hazard
Pennsylvania - Workplace Hazard
Massachusetts - Hazardous Substance
New York City - Hazardous Substance

Canadian Regulatory Information
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

<p>NFPA</p> 	<p>HMIS</p> <table border="1"> <tr> <td>HEALTH</td> <td style="text-align: center;">1</td> </tr> <tr> <td>FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td>REACTIVITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;"> </td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	
HEALTH	1								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION									

16. Other Information

Revision/Preparer Information
This MSDS Supersedes A Previous MSDS Dated: 08/22/2006

Disclaimer

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).

Environmental Data Sheet (Certified Product Data Sheet)

This document includes all data required by 40 CFR 63.801 (a) for a certified product data sheet under criteria specified in 40 CFR 63.805 (a). All data shown below is maximum theoretical values based on the product as currently formulated by Henry Company. Variations may occur on individual batches due to adjustments made during production.

Product Physicals

HE027 – 027 Emulsions

Coating density (lbs/gal US)	8.51
Solids (weight %)	54-59
Solids (volume %)	54-59
Total Volatiles (lbs/gal US)	0
Volatiles Per Volume Solids (lbs/gal US)	0
Total HAPS (% weight)	0

	SARA 302	CERCLA	SARA 313	HAPS 112	%WT
VOLATILE INGREDIENTS/Regulated					
NA					
NON-VOLATILE INGREDIENTS / Regulated					
Petroleum Asphalt (8052-42-4)	N	N	N	N	52.7
Rosin (8050-09-07)	N	N	N	N	1.9
RELATED COMPOUNDS / Regulated					
Water	N	N	N	N	45.4
TOTAL					100

Signature: _____

Name:

John Kinast

Title:

Environmental Engineer, Henry Company

Date:

1/11/07

Telephone Number:

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