



H.M.I.S. RATING	
Health	1
Flammability	0
Reactivity	0
Protective Equip.	E

## Material Safety Data Sheet – OSHA 174

### Material Safety Data Sheet

May be used to comply with OSHA's Hazard communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

### US Department of Labor

Occupational Safety and Health Administration  
(Non-Mandatory Form) Form Approved OMB No. 1218-0072

## Petro Seal

### SECTION I - Manufacturer / Product Information

<b>Manufacturer's Name:</b> Cascade Asphalt Sealing 6238 South Tacoma Way Tacoma, WA 98409	<b>Emergency Telephone No.:</b> Chemtrec: 1-800-424-9300 <b>Telephone Number for Information:</b> 1-800-846-9125 <b>Date Prepared:</b> March 20, 2009
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### SECTION II - Chemical Identity Information

Ingredient	CAS #	OSHA PEL	ACGIH TLV	Other Limits	Percent
Vinyl Acetate Monomer	108-05-4	N/A	35 mg/m3		
Ethylene Glycol	107-21-1	100 mg/m3	100 mg/m3		
Texanol	25265-77-4	N/A	N/A		

### SECTION III - Physical / Chemical Characteristics

<b>Boiling Point:</b> 100? Celsius (212? Fahrenheit)	<b>Specific Gravity (H2O = 1):</b> 1.04
<b>Vapor Pressure (mm Hg):</b> Nearly equal to water.	<b>Melting Point:</b> N/A
<b>Vapor Density (AIR = 1):</b> <1	<b>Evaporation Rate (Butyl Acetate = 1):</b> Approximately 1.8
<b>Solubility in Water:</b> Easily dispersible in the liquid state.	
<b>Appearance and Odor:</b> White liquid, mild odor.	

### SECTION IV - Fire and Explosion Hazard Data

<b>Flash Point (Method Used):</b> N/A	<b>Flammable Limits:</b> N/A	<b>LEL:</b> N/A	<b>UEL:</b> N/A
<b>Extinguishing Media:</b> Foam, CO2, dry chemical, water fog, other.			
<b>Special Fire Fighting Procedures:</b> Full protective equipment, including self-contained breathing apparatus to be worn. Water cool sealed containers in area of fire to prevent rupture due to steam generation.			
<b>Unusual Fire and Explosion Hazards:</b> N/A			

### SECTION V - Reactivity Data

<b>Stability:</b> Unstable: Stable: X	<b>Conditions to Avoid:</b> Keep from freezing and extreme heat.
<b>Incompatibility (Materials to Avoid):</b> Strong oxidizers.	
<b>Hazardous Decomposition or Byproducts:</b> Combustion may yield fumes, smoke, carbon monoxide, carbon dioxide and other toxic pyrolysis products.	
<b>Hazardous Polymerization:</b> May Occur:	<b>Will Not Occur:</b> X
<b>Conditions to Avoid:</b> N/A	

## SECTION VI - Health Hazard Data

**Route(s) of Entry:**      **Inhalation?** Yes      **Skin Contact?** No      **Ingestion?** Yes      **Eye Contact?** Yes

**Health Hazards (Acute and Chronic):**

**(Acute):** Dizziness, weakness, nausea, headache.

**(Chronic):** Gastrointestinal irritation – prolonged or repeated exposure to high vapor concentrations may cause damage to kidneys, liver, lungs, blood, or central nervous system. Repeated ingestion may cause liver damage.

**Carcinogenicity:**      **NTP?** No      **IARC Monographs?** No      **OSHA Regulated?** No

**Signs and Symptoms of Exposure:**

**Inhalation:** Vapor could cause headache, irritation to nose and throat, dizziness, weakness and nausea.

**Ingestion:** Can cause nausea, vomiting, diarrhea.

**Skin:** Not easily absorbed – prolonged or repeated exposure may be mildly irritating to the skin. May cause allergic skin reactions in some people.

**Eye:** Irritation from vapor or liquid.

**Medical Conditions Generally Aggravated by Exposure:** None known.

**Emergency and First Aid Procedures:**

**Inhalation:** Remove to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial resuscitation. IMMEDIATELY CALL A PHYSICIAN.

**Ingestion:** If vomiting begins keep head below hips to avoid aspiration into lungs. DO NOT INDUCE VOMITING. Give victim a glass of water or milk. Never give anything by mouth to an unconscious person. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

**Skin Contact:** Wash area with soap and water. Remove contaminated clothing. IF IRRITATION OCCURS, CALL A PHYSICIAN.

**Eye Contact:** Gently flush with large amounts water for at least 15 minutes or until eye is clear. IMMEDIATELY CALL A PHYSICIAN.

## SECTION VII - Precautions for Safe Handling and Use

**Steps to be taken in case material is released or spilled:** Dike and contain spill with inert material (sand, sawdust, diatomaceous earth, etc.). Pump liquid into storage tanks. Remaining liquid may be taken up with inert materials. Place in closed container for proper disposal.

**Waste Disposal Method:** Dispose of in accordance with Local, State, and Federal regulations.

**Precautions to Be Taken in Handling and Storage:** Keep container closed and upright to prevent leakage. Avoid freezing or temperatures above 50° Celsius.

**Other Precautions:** Do not take internally. Keep away from children. Avoid breathing vapors. For external use only.

## SECTION VIII - Control Measures

**Respiratory Protection (Specify Type):** None required if good ventilation is maintained. Otherwise use NIOSH approved respirator designed to remove particles and vapor.

**Ventilation:**      **Local Exhaust:** Yes      **Special:** N/A

**Mechanical (General):** N/A      **Other:** N/A

**Protective Gloves:** Yes      **Eye Protection:** Yes

**Other Protective Clothing or Equipment:** A rubber apron is recommended to protect clothing from splash during application.

**Work/Hygienic Practices:** Do not apply during or just before (within one hour) of rain to avoid contamination of runoff water. Wash hands before eating.

## SECTION IX - Disclaimer

All information, recommendations, and suggestions concerning this product are based upon tests, literature references, and/or calculations, believed to be reliable. The manufacturer makes no guarantee, expressed or implied, as to the affect of use, or the safety and toxicity of the product. The information contained in this sheet cannot be taken as the sum total of all protective measures to be taken.



## MATERIAL SAFETY DATA SHEET

### SECTION I - MANUFACTURER IDENTIFICATION

CASCADE ASPHALT SEALING CO  
6238 SOUTH TACOMA WAY  
TACOMA, WA 98409

EMERGENCY PHONE: CHEMTREC 1-800-424-9300  
INFORMATION PHONE: 1800-846-9125  
DATE PREPARED: MAY 7, 2009

### SECTION II - PRODUCT IDENTIFICATION

PRODUCT NAME: GATOR AID  
PRODUCT CODE: A-450

### SECTION III - HAZARDOUS INGREDIENTS / SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS #	OSHA PEL	ACGIH TLV	OTHER	% (OPT)
		mg/M3	mg/M3		
Asphalt Residual	08052-42-4	5.0	5.0 (fume)		<25.00
Synthetic Polymer	108-05-4				< 5.00
Crystalline Silica Quartz	7631-86-9	0.1	0.1		<30.00
Water	7732-18-5				<35.00
Aluminum Silicate	1332-58-7	0.1	0.1		<15.00
Health: 1	Flammability: 0	Reactivity: 0	Ratings based on NFPA		

### SECTION IV - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: 212°F  
SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.15  
VAPOR PRESSURE (mm Hg): NA  
MELTING POINT: NA  
VAPOR DENSITY (AIR=1): Heavier  
EVAPORATION RATE (Butyl Acetate=1): Water  
SOLUBILITY in WATER: Soluble  
APPEARANCE and ODOR: Black, Pungent Odor

### SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NA  
FLAMMABLE LIMITS: LEL: NA UEL: NA  
EXTINGUISHING METHOD: Water, all purpose (ABC) dry chemical, CO<sub>2</sub> foam.  
SPECIAL FIRE FIGHTING PROCEDURES: Although this material will not burn, if it is in the fire area, an approved, self-contained breathing apparatus should be worn to prevent exposure to thermal decomposition products and residual monomers.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: **NON FLAMMABLE in EMULSION STATE.**  
NOTE: In Asphalt State: Small fires-use dry chemical, CO<sub>2</sub>, Halon Water spray or standard foam. Large fires-use water spray, fog or standard foam.

## SECTION VI - REACTIVITY DATA

**CONDITIONS TO AVOID:** Avoid heat, sparks or open flame.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Any strong oxidizing agents.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**STABILITY:** Stable.

## SECTION VII - HEALTH HAZARD DATA

**CARCINOGENITY:** NTP? No **IARC MONOGRAPHS?** No **OSHA REGULATED?** No

**SIGNS and SYMPTOMS of EXPOSURE:**

**EYES:** May cause mild irritation.

**SKIN:** May cause slight to mild irritation.

**INHALATION:** May cause dizziness, headache, nausea.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particle matter exposure.

**EMERGENCY and FIRST AID PROCEDURES:**

**INHALATION:** Remove from contaminated area. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration - Call Physician.

**INGESTION:** If conscious give 1 to 2 glasses of milk or water, induce vomiting and call a physician. ***NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.***

**EYES:** Immediately flush with water for at least 15 minutes holding eyelids open. Call a physician if irritation develops.

**SKIN:** Remove contaminated clothing and launder before reuse. Wash skin with soap and water.

## SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Remove all ignition sources. Avoid breathing vapors. Open all windows and doors. Keep out of sewers and water sources. Advise proper authorities.

**WASTE DISPOSAL METHODS:** As provided under Resources Conservation and Recovery Act (RCRA), and in accordance with Federal, State and Local Regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Keep containers closed when not in use. Do not handle or store near heat, sparks or open flame or strong oxidants.

**OTHER PRECAUTIONS:** Avoid breathing vapors. Avoid prolonged or repeated skin contact.

## SECTION IX - CONTROL MEASURES

**RESPIRATORY PROTECTION:** Use a NIOSH approved respirator.

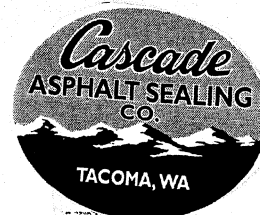
**VENTILATION:** Must be adequate, use local exhaust as needed.

**PROTECTIVE GLOVES:** Use rubber gloves as needed.

**EYE PROTECTION:** Use goggles or face shield.

**OTHER PROTECTIVE CLOTHING or EQUIPMENT:** As needed to avoid skin contact.

**WORK / HYGENIC PRACTICES:** Wash skin and exposed clothing thoroughly with soap and water after use.



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EMERGENCY PHONE: CHEMTREC 1-800-424-9300  
INFORMATION PHONE: 1800-846-9125  
DATE PREPARED: MAY 7, 2009

### SECTION II - PRODUCT IDENTIFICATION

PRODUCT NAME: POURABLE CRACK FILLER  
PRODUCT CODE: A-400

### SECTION III - HAZARDOUS INGREDIENTS / SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS #	OSHA PEL mg/M3	ACGIH TLV mg/M3	OTHER	% (OPT)
Asphalt Residual	08052-42-4	5.0	5.0 (fume)		<60.00
Synthetic Polymer	108-05-4				<10.00
Crystalline Silica Quartz	7631-86-9	0.1	0.1		< 5.00
Water	7732-18-5				<35.00
Aluminum Silicate	1332-58-7	0.1	0.1		<10.00
Health: 1	Flammability: 0	Reactivity: 0	Ratings based on NFPA		

### SECTION IV - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: 212°F  
SPECIFIC GRAVITY (H2O=1): 1.10  
VAPOR PRESSURE (mm Hg): NA  
MELTING POINT: NA  
VAPOR DENSITY (AIR=1): Heavier  
EVAPORATION RATE (Butyl Acetate=1): Water  
SOLUBILITY in WATER: Soluble  
APPEARANCE and ODOR: Black, Pungent Odor

### SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NA  
FLAMMABLE LIMITS: LEL: NA UEL: NA  
EXTINGUISHING METHOD: Water, all purpose (ABC) dry chemical, CO2 foam.  
SPECIAL FIRE FIGHTING PROCEDURES: Although this material will not burn, if it is in the fire area, an approved, self-contained breathing apparatus should be worn to prevent exposure to thermal decomposition products and residual monomers.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: **NON FLAMMABLE in EMULSION STATE.**  
NOTE: In Asphalt State: Small fires-use dry chemical, CO2, Halon Water spray or standard foam. Large fires-use water spray, fog or standard foam.

## SECTION VI - REACTIVITY DATA

**CONDITIONS TO AVOID:** Avoid heat, sparks or open flame.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Any strong oxidizing agents.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**STABILITY:** Stable.

## SECTION VII - HEALTH HAZARD DATA

**CARCINOGENITY:** NTP? No **IARC MONOGRAPHS?** No **OSHA REGULATED?** No

**SIGNS and SYMPTOMS of EXPOSURE:**

**EYES:** May cause mild irritation.

**SKIN:** May cause slight to mild irritation.

**INHALATION:** May cause dizziness, headache, nausea.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particle matter exposure.

**EMERGENCY and FIRST AID PROCEDURES:**

**INHALATION:** Remove from contaminated area. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration - Call Physician.

**INGESTION:** If conscious give 1 to 2 glasses of milk or water, induce vomiting and call a physician. **NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

**EYES:** Immediately flush with water for at least 15 minutes holding eyelids open. Call a physician if irritation develops.

**SKIN:** Remove contaminated clothing and launder before reuse. Wash skin with soap and water.

## SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Remove all ignition sources. Avoid breathing vapors. Open all windows and doors. Keep out of sewers and water sources. Advise proper authorities.

**WASTE DISPOSAL METHODS:** As provided under Resources Conservation and Recovery Act (RCRA), and in accordance with Federal, State and Local Regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Keep containers closed when not in use. Do not handle or store near heat, sparks or open flame or strong oxidants.

**OTHER PRECAUTIONS:** Avoid breathing vapors. Avoid prolonged or repeated skin contact.

## SECTION IX - CONTROL MEASURES

**RESPIRATORY PROTECTION:** Use a NIOSH approved respirator.

**VENTILATION:** Must be adequate, use local exhaust as needed.

**PROTECTIVE GLOVES:** Use rubber gloves as needed.

**EYE PROTECTION:** Use goggles or face shield.

**OTHER PROTECTIVE CLOTHING or EQUIPMENT:** As needed to avoid skin contact.

**WORK / HYGIENIC PRACTICES:** Wash skin and exposed clothing thoroughly with soap and water after use.

# Dura-Fill

## Material Safety Data Sheet

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### Section One: Product Identification

<b>Product Name:</b> Dura-Fill brand hot melt crack and joint sealants.	<b>Note:</b> This MSDS complies with requirements of the Hazardous Communication Standard, OSHA 29 CFR 1910.1200
<b>Chemical Name, Family &amp; Synonyms:</b> Rubber Modified Asphalt Materials	<b>Hazard Classification:</b>
	Health = 1
<b>Formula:</b> Mixture contains asphalt cement, rubbers, extenders, and reinforcing fillers	Fire = 1
	Reactivity = 0
<b>DOT Shipping Classification:</b> Non Haz Mat	<b>Emergency Assistance:</b> 419-621-1966

### Section Two: Hazardous Ingredients / Identity Information

Hazardous Components (Specific Chemical Identity / Common Name)	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (opt)
Asphalt (CAS 8052-42-4)		5 mg / m <sup>3</sup>		

### Section Three: Physical Chemical Characteristics

<b>Boiling Point:</b> Greater than 600oF	<b>Specific Gravity:</b> (H <sub>2</sub> O = 1) 1.0-1.3
<b>Vapor Pressure:</b> (mm Hg) Not Applicable	<b>Melting Point:</b> (ASTM-D36, Ring and Ball Softening Point) 160-220°F
<b>Vapor Density:</b> (AIR=1) Not Applicable	<b>Evaporation Rate:</b> (Butyl Acetate=1) NA Material does not experience evaporation
<b>Solubility in Water:</b> Negligible	<b>Appearance and Odor:</b> Black adhesive, odor of petroleum, Solid at 77oF/ liquid above 275°F

### Section Four: Fire and Explosive

<b>Flash Point:</b> (Method Used) C.O.C. (ASTM-D92) 424°F Minimum	<b>Special Fire Procedures:</b> Use of self controlled breathing apparatus in enclosed areas and full body protection gear including face shield, trench coats, gloves, and rubber boots. Concentrated vapors from combustion should not be breathed.
<b>Flammable Limits:</b> NA	
<b>LEL</b>	<b>Unusual Fire and Explosion Hazards:</b> Material will not burn unless pre-heated. Black, dense, hazy smoke forms during burning. Keep sparks away from concentrated fumes.
<b>UEL</b>	
<b>Extinguishing Media:</b> CO <sub>2</sub> , Dry Chemical, Foam	



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DATE PREPARED: MAY 7, 2009

# Dura-Fill

## Material Safety Data Sheet

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### Section Five: Reactivity Data

<b>Stability:</b> Stable	<b>Conditions to Avoid:</b> Do NOT expose fumes from heated product to sources of ignition.
<b>Incompatibility:</b> Strong oxidizing materials	<b>Hazardous Decomposition or Byproducts:</b> Combustion may produce various oxides of carbon. (CO, CO <sub>2</sub> ...)
<b>Hazardous Polymerization:</b> Will NOT Occur	<b>Conditions to Avoid:</b> None Known

### Section Six: Health and Hazard Data

<b>Routes of Entry:</b>	<b>Inhalation:</b> Yes, fumes <b>Skin:</b> Yes, hot material <b>Ingestion:</b> Rare	<b>Health Hazards (Acute/Chronic):</b> High fume concentrations may irritate eyes and respiratory tract. Hot product may cause minor to severe burns when contacts skin.
<b>Carcinogenity:</b>	<b>NTP:</b> NO <b>IARC Monographs:</b> No <b>OSHA Regulated:</b> No	<b>Signs and Symptoms of Exposure:</b> Inhalation-irritation, nausea, dizziness, headaches Skin Contact with Solid Product - No Irritation Skin Contact with Hot Product - Burns
<b>Medical Conditions:</b> Respiratory problems may be aggravated by petroleum fumes	<b>Emergency and First Aid Procedures:</b> Inhalation: Remove to fresh air, assist breathing if necessary Burns: Cool with water, remove with mineral oil/soap/water Get medical help for severe burns	

### Section Seven: Precautions for Safe Handling and Use:

<b>Steps to be taken in case material is released or spilled:</b> Permit material to cool to a solid, Cover with earth to reduce adhesiveness, Place in appropriate containers to transport to a waste disposal site
<b>Waste Disposal Method:</b> Burry collected material in approved landfill or burn in approved incinerator; Follow local, state, & federal regulations
<b>Precautions taken in Handling &amp; Storing:</b> Keep pallets intact in storage, Packages of unused material present no known health / safety hazards
<b>Other Precautions:</b> Be aware of burn hazards, which are possible if skin contact occurs during use. Avoid inhalation of excessive amounts of fumes, Practice good personal hygiene.

### Section Eight: Control Measures

<b>Respiratory Protection:</b> In high fume concentration, NIOSH respirator with organic and mist filter
<b>Ventilation:</b> Local Exhaust to keep fumes below TLV, Mechanical and Specialty Ventilation not generally required
<b>Protective Gloves:</b> To protect hands and arms from hot material
<b>Eye Protection:</b> Safety Goggles
<b>Other Protective Clothing/Equipment:</b> To prevent skin contact with hot material
<b>Work/Hygienic Practices:</b> Use good personal hygiene, wash hands and exposed skin with soap and water