



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Asphalt</b>
<b>Other means of identification</b>	
<b>SDS number</b>	208-GHS
<b>Synonyms</b>	PBA/PG Grade Paving Asphalt; SPG Surface Performance Grade Asphalt; AR/AC Paving Grade Asphalt; AC Grade Petroleum Asphalt; Asphalt Cement; PEN Grade Asphalt; AS20; Emulsion Base Stock (E.B.S.) Asphalt; Asphalt, Flux; Asphalt, Saturant; Solvent Deasphalted Bottoms Petroleum Asphalt; Propane Deasphalted Bottoms Petroleum Asphalt; Vacuum Tower Bottoms Petroleum Asphalt; Steam Refined Asphalt; Mildly Oxidized Petroleum Asphalt
<b>Recommended use</b>	Asphalt products are to be used as road and highway paving applications; waterproofing and sealing applications; coatings; or other engineering applications. Use in other applications may result in higher exposures and require additional engineering controls and personal protective equipment.
<b>Recommended restrictions</b>	No other uses are advised.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer/Supplier</b>	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000
<b>General Assistance</b>	210-345-4593
<b>E-Mail</b>	CorpHSE@valero.com
<b>Contact Person</b>	Industrial Hygienist
<b>Emergency Telephone</b>	24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Carcinogenicity	Category 2
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Suspected of causing cancer.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	If exposed or concerned: Get medical advice/attention.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Asphalt	8052-42-4	0 - 100
Vacuum tower bottoms	64741-56-6	0 - 100
Distillates, petroleum residues, vaccum	68955-27-1	0 - 15
Hydrogen sulfide	7783-06-4	<0.1

**Composition comments** Dangerous amounts of hydrogen sulfide, a highly toxic gas, may be present, especially in the headspace of containers.

Note: Component ranges represent multiple product grades (see Synonyms - Section 1). Actual concentrations may be substantially less than the maximum values shown or zero, depending on the product grade or specifications.

#### 4. First-aid measures

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Skin contact** In case of contact with hot or molten product, cool rapidly with water and seek immediate medical attention. Do not attempt to remove molten product from skin because skin will tear easily. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

**Ingestion** Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

**Most important symptoms/effects, acute and delayed** Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

**Indication of immediate medical attention and special treatment needed** In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General information** If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet.

**Specific hazards arising from the chemical** Thermal decomposition or combustion may liberate toxic gases or fumes.

**Special protective equipment and precautions for firefighters** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

**Fire fighting equipment/instructions** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Extinguish all flames in the vicinity. Keep unnecessary personnel away. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Recover as much product as possible. Allow molten material to harden before clean up. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Small Spills: Allow spilled material to solidify and scrape up with shovels into a suitable container for recycle or disposal. Collect spillage. Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Review Firefighting Measures, Section 5, before proceeding with clean up. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

**7. Handling and storage**

**Precautions for safe handling**

Wear personal protective equipment. Avoid breathing mist or vapor from heated material. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. Do not handle, store or open near an open flame, sources of heat or sources of ignition. When using, do not eat, drink or smoke. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities**

Material is normally stored in closed tanks at 250 to 375F. Do not handle liquid (heated) material; allow to cool and solidify before handling. Liquid must be transferred and stored in engineered systems designed for heated materials.

**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fume.
Vacuum tower bottoms (CAS 64741-56-6)	TWA	0.5 mg/m3	Inhalable fume.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.
Vacuum tower bottoms (CAS 64741-56-6)	Ceiling	5 mg/m3	Fume.

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

**Skin protection**

**Hand protection**

Wear protective gloves.

**Skin protection**

**Other**

Flame retardant protective clothing is recommended.

**Respiratory protection**

Wear a NIOSH-approved (or equivalent) respirator as needed.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance</b>	Dark brown to black liquid at normal use temperatures above 300F. Semi-solid at 70F.
<b>Physical state</b>	Liquid.
<b>Form</b>	Semi-Solid at 70F
<b>Color</b>	Brown/black.
<b>Odor</b>	Strong petroleum.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	100 - 150 °F (37.78 - 65.56 °C) (Softening point)
<b>Initial boiling point and boiling range</b>	700 - 1100.1 °F (371.1 - 593.4 °C)
<b>Flash point</b>	325.0 - 450.0 °F (162.8 - 232.2 °C) (COC) Depending on product specifications.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	> 0.9
<b>Flammability limit - upper (%)</b>	< 7
<b>Vapor pressure</b>	< 0.01 kPa @ 20 °C
<b>Vapor density</b>	> 1.6 (Air = 1)
<b>Relative density</b>	1 - 1.2 (Water=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 600.1 °F (> 315.61 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable under normal temperature conditions and recommended use.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May be harmful if inhaled. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.
<b>Skin contact</b>	May cause skin irritation.
<b>Eye contact</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

### Information on toxicological effects

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Hydrogen sulfide (CAS 7783-06-4)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	> 0.38 mg/l, 960 Minutes
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.	
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.	
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.	
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.	
<b>Carcinogenicity</b>	Suspected of causing cancer. Contains polycyclic aromatic compounds (PACs). Prolonged and/or repeated skin contact with certain PACs has been shown to cause skin cancer. Prolonged and/or repeated exposures by inhalation of certain PACs may also cause cancer of the lung and of other sites of the body. Occupational exposure to straight-run asphalts and their emissions during road paving: 2B Possibly carcinogenic to humans.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Asphalt (CAS 8052-42-4)		2B Possibly carcinogenic to humans.
Distillates, petroleum residues, vacuum (CAS 68955-27-1)		2B Possibly carcinogenic to humans.
Vacuum tower bottoms (CAS 64741-56-6)		2B Possibly carcinogenic to humans.
<b>NTP Report on Carcinogens</b>		
Not listed.		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>		
Not listed.		
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.	
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.	
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.	
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.	
<b>Further information</b>	Symptoms may be delayed.	
<b>12. Ecological information</b>		
<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulative potential</b>	Not available.	
<b>Mobility in soil</b>	Not available.	
<b>Other adverse effects</b>	This product contains one or more substances identified as hazardous air pollutants (HAPs) per the US Federal Clean Air Act (see section 15).	
<b>13. Disposal considerations</b>		
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.	
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.	
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities.	

## 14. Transport information

### DOT

UN number	UN3257
UN proper shipping name	Elevated temperature liquid, n.o.s. (Asphalt)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB1, T3, TP3, TP29
Packaging exceptions	None
Packaging non bulk	None
Packaging bulk	247

### IATA

UN number	UN3257
UN proper shipping name	Elevated temperature liquid, n.o.s. (Asphalt)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	-
Environmental hazards	No.
ERG Code	9L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

UN number	UN3257
UN proper shipping name	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-P
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### General information

Classification applies only if this product is shipped at or above temperatures of 100°C. If shipped below this temperature, the product is not regulated for transport.

Shipping descriptions in this section are offered as examples only. Classification for transport must accurately reflect the material hazards as designated under a variety of regulations and is solely the responsibility of the person offering the material into transport for commerce.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Asphalt (CAS 8052-42-4) Listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

### Toxic Substances Control Act (TSCA)

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Carcinogenicity

### SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Asphalt (CAS 8052-42-4)

Vacuum tower bottoms (CAS 64741-56-6)

### US. New Jersey Worker and Community Right-to-Know Act

Asphalt (CAS 8052-42-4)

Distillates, petroleum residues, vacuum (CAS 68955-27-1)

Vacuum tower bottoms (CAS 64741-56-6)

### US. Pennsylvania Worker and Community Right-to-Know Law

Asphalt (CAS 8052-42-4)

Vacuum tower bottoms (CAS 64741-56-6)

### US. Rhode Island RTK

Asphalt (CAS 8052-42-4)

Vacuum tower bottoms (CAS 64741-56-6)

### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Distillates, petroleum residues, vacuum (CAS 68955-27-1)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 27-June-2013  
**Revision date** 20-November-2019  
**Version #** 03  
**NFPA ratings**



### References

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

### Disclaimer

The information in this Safety Data Sheet (SDS) was obtained from sources believed to be reliable and accurate, and is not represented as being absolutely complete. The end user of this product has the responsibility for evaluating the adequacy of the data for the intended application and conditions of use; for determining the safety, toxicity, regulatory requirements, and suitability of the product under these conditions; and for obtaining additional or clarifying data where uncertainty exists. The data serves as general guidance when used in combination with professional judgement of persons experienced in a specific application, use or process; and additional data may be required. Valero Marketing & Supply Co., (Valero) provides this data without any warranty, expressed or implied regarding its correctness or accuracy; and does not assume any liability arising out of product handling, storage, use or disposal by others.