SAFETY DATA SHEET



1. Identification

Product identifier 180-220 Pen Asphalt

Other means of identification

Product Code 1660

Recommended useNot available. **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer:Tricor Refining, LLC.Address:P.O. Box 5877

Bakersfield, CA 93388

24-hour Telephone

Number:

(661) 393-7110

CHEMTREC: 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements



Signal word Warning

Hazard statement Suspected of causing cancer.

Precautionary statement

Prevention Wear protective gloves/eye protection/face protection. Obtain special instructions before use. Do

not handle until all safety precautions have been read and understood.

Response IF exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container to an appropriate treatment and disposal facility in accordance with

applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise

classified (HNOC)

Molten asphalt presents a thermal hazard.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	me and synonyms CAS number	<u>%</u>
ASPHALT	8052-42-4	< 100
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY	64741-96-4	< 10
, , , , , , , , , , , , , , , , , , , ,	64741-96-4	<

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4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician if symptoms develop or persist.

Immediately place the affected skin under running water for at least 20 minutes - DO NOT DELAY. Skin contact

> Prolonged flushing/cooling is necessary. Ice (or "cold packs") may be used in the event that water is unavailable. Do not attempt to remove the asphalt. Do not place any sheets or towels on top of

the asphalt due to the risk of adhesion. Get immediate medical attention.

Eye contact Immediately flush eves with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention or advice.

Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large **Ingestion**

amount does occur, call a poison control center immediately.

Do not use a solid water stream as it may scatter and spread fire.

Most important symptoms/effects, acute and Not available.

delaved

5. Fire-fighting measures

Suitable extinguishing media Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for

firefighters Fire fighting

Specific methods

equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use of foam or water may cause frothing.

In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with

water spray.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and materials for containment and cleaning up Dike far ahead of spill for later disposal. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Environmental precautions Not available.

7. Handling and storage

Precautions for safe handling

Avoid contact with molten material. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Do not add water to hot product.

This may result in frothing of the mixture causing hot asphalt to overflow the container

Conditions for safe storage, including any incompatibilities

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place.

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8. Exposure controls/personal protection

Occupational exposure limits

IIS ACGIH Threshold Limit Values

Material	Туре	Value	Form
180-220 Pen Asphalt	TWA	0.5 mg/m3	Inhalable fraction.
Components	Туре	Value	Form
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC (CAS 64741-96-4)	TWA	5 mg/m3	Inhalable fraction.

Material name: 180-220 Pen Asphalt

US. NIOSH: Pocket Guide to Chemical Hazards

MaterialTypeValueForm180-220 Pen AsphaltCeiling5 mg/m3Fume.

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

Appropriate engineering Provide a

controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined

occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses. Wear face shield if there is risk of splashes.

Skin protection

Hand protection Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely

wear gauntlet style gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended. Wear 100% cotton

clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

Thermal hazards During product use, there is a risk of thermal burns.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

9. Physical and chemical properties

Appearance Brown to black in color.

Physical state Liquid.

Form Semi-solid at ambient temperature

Color Black.
Odor Tar-like
Odor threshold Not available.
PH Not available.
Melting point/freezing point Not available.

Initial boiling point and

boiling range

> 700 °F (> 371.11 °C)

Flash point > 450.0 °F (> 232.2 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

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(%)

Not available.

Vapor pressure < 1 mm Hg at 70F

Vapor density > 5

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature > 700 °F (> 371.11 °C)

Decomposition temperature Not available. **Viscosity** Not available.

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Other information

Specific gravity 0.98 - 1.04

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport

Chemical stability Stable under normal temperature conditions. **Possibility of hazardous** Hazardous polymerization does not occur.

reactions

Conditions to avoid Incompatible materialsDo not overheat product.
Strong oxidizing agents.

Hazardous decomposition Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or

products low molecular weight hydrocarbons. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

InhalationMay cause irritation to the respiratory system.Skin contactMolten material will produce thermal burns.Eye contactMolten material will produce thermal burns.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Not available.

Serious eye damage/eye

Not available.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Not available.

Germ cell mutagenicity Not available.

Carcinogenicity 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

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not available. **Specific target organ toxicity** Not available.

single exposure

Not available.

Specific target organ toxicity - repeated exposure

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity This product has no known eco-toxicological effects.

Persistence and degradabilityNot available.Bioaccumulative potentialNot available.Mobility in soilNot available.Other adverse effectsNot available.

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13. Disposal considerations

Disposal instructionsAllow molten resin to solidify before disposal. Dispose in accordance with all applicable regulations.

When this product as supplied is to be discarded as waste, it does not meet the definition of a

RCRA waste under 40 CFR 261.

Hazardous waste code Not applicable.

Waste from residues / Empty containers or liners may retain some product residues. This material and its container must

unused products be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging No special precautions.

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 Packing group III

Special precautions for Not available.

user

IATA

UN number Not available. **UN proper shipping name** Forbidden

Transport hazard class(es)

Class Forbidden

Subsidiary risk

Packing group Not available.

Environmental hazards No.

Special precautions for Not available.

user

IMDG

UN number UN3257

UN proper shipping name Elevated temperature liquid, n.o.s. (ASPHALT)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III

Environmental hazards

Marine pollutant No.

EmS Not available. **Special precautions for** Not available.

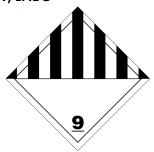
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Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

DOT; IMDG



Further information

Shipping Marking: HOT. Transport by air is forbidden when shipped above 212°F (100°C).

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15. Regulatory information

US federal regulations

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

Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

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 WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

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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	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

 Issue date
 05-11-2015

 Revision date
 10-10-2018

Version # 03

Further information HMIS® is a registered trade and service mark of the NPCA.

NFPA ratings Health: 2

Flammability: 1 Instability: 0

Material name: 180-220 Pen Asphalt

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).

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

Revision information Physical & Chemical Properties: Multiple Properties

Regulatory Information: United States HazReg Data: International Inventories

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