

Safety Data Sheet

229 Asphalt Cements/Mastics/Coatings



SDS Revision Date:

05/01//2015

1. Identification

1.1. Product identifier

Product Identity 229, Asphalt Cements/Mastics/Coatings
Alternate Names 229, Asphalt Cements/Mastics/Coatings

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.
Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Karnak Corporation
330 Central Ave.
Clark, NJ 07066 USA
Emergency www.karnakcorp.com
CHEMTREC (USA) (800) 424-9300
24 hour Emergency Telephone No. OUTSIDE THE U.S AND CANADA 1-202-483-7616
Customer Service: Karnak Corporation 1-800-526-4236

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 3;H226 Flammable liquid and vapor.
Skin Sens. 1;H317 May cause an allergic skin reaction.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Warning

H226 Flammable liquid and vapor.
H317 May cause an allergic skin reaction.

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[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P235 Keep cool.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P313 Get medical advice / attention.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|-------------------------------------------------------------------------|----------|--------------------|--------|
| Asphalt (petroleum) CAS Number: 0008052-42-4 | 25 - 50 | Not Classified | [1][2] |
| Solvent naphtha (petroleum), light aromatic CAS Number: 0064742-95-6 | 25 - 50 | Asp. Tox. 1;H304 | [1] |
| Styrene-Butadiene polymer CAS Number: 0009003-55-8 | 10 - 25 | Skin Sens. 1;H317 | [1] |

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In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

| | |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------|
| General | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. |
| Inhalation | If respiratory discomfort occurs, remove to fresh air. If discomfort continues, administer oxygen and get medical attention. |
| Eyes | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | If this product comes in contact with skin, remove material with mineral oil, then wash with soap and plenty of water. |
| Ingestion | If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. |

4.2. Most important symptoms and effects, both acute and delayed

Overview

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause tearing, stinging, redness, irritation, and burns.

Inhalation: Irritating to respiratory tract. Prolonged or repeated breathing of very high vapor concentrations cause euphoria, excitation, and dizziness, headaches, nausea, and vomiting, abdominal pain, fatigue, muscular weakness. Aspiration into the lungs can cause CNS (central nervous system) and subsequent aspiration into the lungs can cause pulmonary edema and chemical pneumonia depression. Chronic overexposure in high concentrations may produce CNS depression.

Ingestion: Irritation of the mouth, esophagus, and stomach can develop following ingestion. Symptoms include burning of the mouth, sore throat, vomiting, nausea, dizziness, loss of consciousness. Due to its light viscosity, there is danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death.

Skin Contact: Prolonged or repeated skin contact may cause moderate to severe irritation including itching and redness of the skin, defatting, and/or dermatitis. This product can also be absorbed through the skin and produce CNS symptoms. Single prolonged exposure is not likely to result in the product being absorbed through the skin in harmful amounts.

Signs And Symptoms Of Exposure: Eye irritation, respiratory irritation, drying and cracking of skin, dizziness, fatigue, headache, unconsciousness or asphyxiation. Chronic effects of ingestion and subsequent aspiration into the lungs can cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Repeated breathing of vapors can cause effects to liver and kidneys.

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and

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central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Skin May cause an allergic skin reaction.

5. Fire-fighting measures

5.1. Extinguishing media

Use dry chemicals, carbon dioxide foam, water fog, or inert gas (nitrogen) for small fires. For large fires use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures but might cause frothing and/or not achieve extinguishment. A water jet may be used to cool the container's external walls to prevent pressure build-up, auto ignition, or explosion. NEVER use a water jet directly on the fire. Product will float and can be re-ignited on surface of water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust / fume / gas / mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

5.3. Advice for fire-fighters

When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

Minimize breathing vapors, gases or fumes of decomposition products. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

ERG Guide No. 130

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

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6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Eliminate sources of ignition, and ventilate the area. Add sand or earth or absorb spill with suitable absorbent material and place in a closed container.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

Eliminate ignition sources. Soak up with noncombustible absorbent material. Remove absorbent material for proper disposal.

7. Handling and storage

7.1. Precautions for safe handling

The requirements of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations apply if the flashpoint is between 21°C and 32°C.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

Incompatible materials: Strong acids, alkalis, and oxidizers such as liquid chlorine, halogens, hydrogen peroxide, oxygen.

Other Precautions: All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Do not reuse containers. Empty containers may contain material residues which can ignite with explosive force. Cutting or welding of empty containers can cause fire, explosion, or release fumes from residues. Keep containers closed and drum bungs in place. Dispose of in a licensed facility.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|---------------------|--------|-------------------------------|
| 0008052-42-4 | Asphalt (petroleum) | OSHA | No Established Limit |
| | | ACGIH | TWA: 0.5 mg/m ³ 2B |

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| | | | |
|--------------|---------------------------------------------|----------|--------------------------|
| | | NIOSH | Ca C 5 mg/m3 [15-minute] |
| | | Supplier | No Established Limit |
| 0009003-55-8 | Styrene-Butadiene polymer | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0064742-95-6 | Solvent naphtha (petroleum), light aromatic | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|---------------------------------------------|--------|---------------------------------------------------------------------|
| 0008052-42-4 | Asphalt (petroleum) | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No; |
| 0009003-55-8 | Styrene-Butadiene polymer | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; |
| 0064742-95-6 | Solvent naphtha (petroleum), light aromatic | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Safety glasses or face shield for liquid material.

Skin

Wear nitrile or similar chemical resistant gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Long sleeves and impervious clothing to protect against splashing.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

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9. Physical and chemical properties

| | |
|--------------------------------------------------------|------------------------------------------------------------------------------------------|
| Appearance | Dark Liquid |
| Odor | Mild Petroleum |
| Odor threshold | Not Measured |
| pH | Not Measured |
| Melting point / freezing point | NA |
| Initial boiling point and boiling range | 300-350F |
| Flash Point | (PMCC): 104F min. |
| Evaporation rate (Ether = 1) | (Butyl Acetate=1)@77F: 0.2 |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured |
| Vapor pressure (Pa) | 3 |
| Vapor Density | (Air=1): > 4 |
| Specific Gravity | (H2O=1): 0.8 - 1.2 |
| Solubility in Water | Insoluble |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Not Measured |

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Excessive heat and open flame.

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10.5. Incompatible materials

Strong acids, alkalis, and oxidizers such as liquid chlorine, halogens, hydrogen peroxide, oxygen.

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Based upon animal testing, the C9 aromatic hydrocarbon components (trimethylbenzenes and ethylmethylbenzenes) are presumed to cause fetal toxicity and/or decreased fetal and newborn weights if overexposure occurs during the early gestation period.

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|------------------------------------------------------------|------------------------------|--------------------------------|---------------------------------|-------------------------------------|--------------------------|
| Asphalt (petroleum) - (8052-42-4) | No data available | No data available | No data available | No data available | No data available |
| Solvent naphtha (petroleum), light aromatic - (64742-95-6) | 6,800.00, Rat - Category: NA | 3,400.00, Rabbit - Category: 5 | No data available | No data available | No data available |
| Styrene-Butadiene polymer - (9003-55-8) | No data available | No data available | No data available | No data available | No data available |

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

| Classification | Category | Hazard Description |
|-------------------------------|----------|--------------------|
| Acute toxicity (oral) | --- | Not Applicable |
| Acute toxicity (dermal) | --- | Not Applicable |
| Acute toxicity (inhalation) | --- | Not Applicable |
| Skin corrosion/irritation | --- | Not Applicable |
| Serious eye damage/irritation | --- | Not Applicable |
| Respiratory sensitization | --- | Not Applicable |

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| | | |
|------------------------|-----|--------------------------------------|
| Skin sensitization | 1 | May cause an allergic skin reaction. |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | --- | Not Applicable |
| Aspiration hazard | --- | Not Applicable |

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|------------------------------------------------------------|---------------------------|-------------------------------|------------------------------------------|
| Asphalt (petroleum) - (8052-42-4) | Not Available | Not Available | Not Available |
| Solvent naphtha (petroleum), light aromatic - (64742-95-6) | 9.22, Oncorhynchus mykiss | 6.14, Daphnia magna | 19.00 (72 hr), Selenastrum capricornutum |
| Styrene-Butadiene polymer - (9003-55-8) | Not Available | Not Available | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

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14. Transport information

| | DOT (Domestic Ground Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|-------------------------------------------|--------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| 14.1. UN number | UN1999 | UN1999 | UN1999 |
| 14.2. UN proper shipping name | Not regulated, non-bulk | Tars, liquid including road oils and cutback bitumens | Tars, liquid including road oils and cutback bitumens |
| 14.3. Transport hazard class(es) | | IMDG: 3 | Air Class: 3 |
| 14.4. Packing group | | III EmS No. F-E, S-E | III |
| 14.5. Environmental hazards | | IMDG: Marine Pollutant: No | Air Class: 3 |
| 14.6. Special precautions for user | | ERG Guide 130 | ERG Guide 130 |

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification B3 D2B

US EPA Tier II Hazards

Fire: Yes

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

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To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Asphalt (petroleum)

Pennsylvania RTK Substances (>1%):

Asphalt (petroleum)

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

Disclaimer: This 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. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

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