1. Identification

Product identifier: Roadsaver Gray Sealant

Other means of identification: None.

Recommended use: Sealant for pavement cracks and joints.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer: Crafco, Inc.
Address: 6165 West Detroit St.
Chandler, AZ 85226 USA

Contact Name: Jim Chehovits
Telephone: 602-276-0406
E-mail: jim.chehovits@crafco.com
CHEMTREC: 800-424-9300 (North America)
+ 1-703-527-3887 (International)

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

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

Label elements

Hazard symbol: None.

Signal word: Not applicable.

Hazard statement: Not applicable.

Precautionary statement

Prevention: Not assigned.

Response: Not assigned.

Storage: Not assigned.

Disposal: Not assigned.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM HYDROCARBON RESIN</td>
<td></td>
<td>64742-16-1</td>
<td>20 - 50</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC</td>
<td></td>
<td>64742-52-5</td>
<td>0 - 20</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td></td>
<td>13463-67-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>CARBON BLACK</td>
<td></td>
<td>1333-86-4</td>
<td>0.6</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed. Call a physician if symptoms develop or persist.
Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly wash (or discard) clothing and shoes before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Do not induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms/effects, acute and delayed: Not available.

Indication of immediate medical attention and special treatment needed: In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies, impaired pulmonary function.

General information: If you feel unwell, seek medical advice (show the label where possible). 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. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire-fighting measures

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Addition of water or foam to the fire may cause frothing.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical: Fire may produce irritating, corrosive and/or toxic gases. Development of hazardous combustion gases or vapors possible in the event of a fire. The following may develop: Acrolein.

Special protective equipment and precautions for firefighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions: In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. In the event of fire, cool tanks with water spray. By fire, toxic gases may be formed (COx, NOx). Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods: In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. Do not touch or walk through spilled material.

Methods and materials for containment and cleaning up: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Dike far ahead of spill for later disposal. Following product recovery, flush area with water.

Environmental precautions: Never return spills in original containers for re-use.

7. Handling and storage

Precautions for safe handling: The product is non-combustible. If heated, irritating vapors may be formed. Do not use in area without adequate ventilation. Wash hands thoroughly after handling. Wash hands after handling. Observe good industrial hygiene practices.

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. Keep the container tightly closed and dry. Store in a closed container away from incompatible materials. Keep out of the reach of children.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK (CAS 1333-86-4)</td>
<td>PEL</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 mppcf</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mppcf</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK (CAS 1333-86-4)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>350 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values

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

Appropriate engineering 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

Wear safety glasses; chemical goggles (if splashing is possible). Wear chemical goggles; face shield (if handling molten material).

Skin protection

Hand protection

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Other

Wear suitable protective clothing and eye/face protection. Use of an impervious apron is recommended.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
During product use, there is a risk of thermal burns.

When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance
Solid Granular or powder.

Physical state
Solid.

Form
Solid.

Color
Grey.

Odor
Mild Petroleum Odor

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
150 - 250 °F (65.56 - 121.11 °C) ASTM D36 Softening Point

Initial boiling point and boiling range
> 800 °F (> 426.67 °C)

Flash point
> 400.0 °F (> 204.4 °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 (%)
Not available.

Vapor pressure
315.77 hPa estimated

Vapor density
Not available.

Relative density
Not available.

Solubility(ies)
Solubility (water)
Not available.

Partition coefficient
(n-octanol/water)
Not available.

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

Decomposition temperature
Not available.

Viscosity
Not available.

Other information
Density
Not Available

Percent volatile
0 %

Specific gravity
1 - 1.9

10. Stability and reactivity

Reactivity
Not available.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Conditions to avoid
Strong oxidizing agents.

Incompatible materials
Incompatible with oxidizing agents.

Hazardous decomposition products
Upon decomposition, product emits acrid dense smoke with carbon dioxide, carbon monoxide, trace oxides of nitrogen and sulfur, and water.
11. Toxicological information

Information on likely routes of exposure

**Inhalation**
May cause irritation to the respiratory system.

**Skin contact**
Irritating to skin.

**Eye contact**
Causes eye irritation. Molten material will produce thermal burns.

**Ingestion**
May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK (CAS 1333-86-4)</td>
<td>LD50</td>
<td>Rat</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
Defats the skin. Causes irritation.

**Serious eye damage/eye irritation**
Irritating to eyes.

**Respiratory or skin sensitization**

**Respiratory sensitization**
Not available.

**Skin sensitization**
Irritating to skin.

**Germ cell mutagenicity**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. This product contains components that may cause cancer, however, after formation this product is encapsulated and the normal routes of exposure are unavailable.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

- CARBON BLACK (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
- DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5) 3 Not classifiable as to carcinogenicity to humans.
- TITANIUM DIOXIDE (CAS 13463-67-7) 2B Possibly carcinogenic to humans.


Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity**
Contains no ingredient listed as toxic to reproduction.

**Specific target organ toxicity**

- single exposure
Not available.

- repeated exposure
Not available.

**Aspiration hazard**
Not available.

**Chronic effects**
Prolonged inhalation may be harmful. May cause eczema-like skin disorders (dermatitis).

12. Ecological information

**Ecotoxicity**
This product has no known eco-toxicological effects. Not expected to be harmful to aquatic organisms.
Product Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia</td>
<td>33333.332 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>LC50 Fish</td>
<td>27586.207 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Persistence and degradability Not available.
Bioaccumulative potential Not available.
Mobility in soil Not available.
Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international 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 / unused products Dispose of in accordance with local regulations.
Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.
General information Not regulated as dangerous goods.
Further information If the product is shipped at temperatures below 212°F (100°C), it is not regulated for transport by ground, air or vessel. If shipped above 212 deg F: "UN3257, Elevated Temperature Liquid, n.o.s. (Asphalt mixture), 9, PG III"

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.

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.
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.

California Proposition 65
California Proposition 65 - CRT: Listed date/Carcinogenic substance
CARBON BLACK (CAS 1333-86-4) Listed: February 21, 2003
TITANIUM DIOXIDE (CAS 13463-67-7) Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
CARBON BLACK (CAS 1333-86-4)
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)
TITANIUM DIOXIDE (CAS 13463-67-7)

International Inventories

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

*A "Yes" indicates that all components of this product comply 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: 09-06-2019
Version #: 01

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

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

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 the sheet was written based on the best knowledge and experience currently available. 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.