

Section 1 - Product and Company Identification

Material Name • TopShield Pro #22 Wet/Dry Flashing Cement

Chemical Category • Asphalt Based Mixture

Product Code • TS-2203

Product Description • All Weather Roof Cement

Product Use • Roof Patch and Flashing Cement

Manufacturer • APOC - Asphalt Products Oil Corporation

4161 East 7th Avenue Tampa, FL 33605

Telephone

General • 813-248-2101

Emergency • 800-424-9300 - CHEMTREC

Technical • 813-248-2101 - Customer Service

Section 2 - Hazards Identification

GHS HAZARDS AND PRECAUTIONS

CAUTION SIGNAL WORD: WARNING!

Flammable liquid (paste) and Vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.

- PreventionAvoid breathing dust, fume, gas, mist, vapors and/or spray. Do not handle until all safety
precautions have been read and understood. Keep away from heat, sparks, open flames and/or
hot surfaces. No smoking. Use personal protective equipment as required. Keep out of reach of
children.
- Response
 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage/Disposal Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



| Physical Form | • | Liquid |
|---------------|---|-------------------|
| Color | • | Black |
| Odor | • | Mild Hydrocarbon. |
| | | |

| Flash Point • 105°F(41°C) (| CC (Closed Cup) |
|--|--|
| UEL • 6 % | |
| LEL • .9 % | |
| OSHA(HCS2012) • Flammable Lic Category 2, S | quids - Category 3, Specific Target Organ Toxicity Repeated Exposure - kin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Carcinogenicity - Category 1A |
| WHMIS • Combustible L | iquids - B3, Other Toxic Effects - D2A, Other Toxic Effects - D2B |
| Category 2, S | quids - Category 3, Specific Target Organ Toxicity Repeated Exposure - kin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Carcinogenicity - Category 1A |
| Potential Health Effects | |
| Inhalation | |
| | tion. Excessive breathing of high vapor concentration can cause possible s and even asphyxiation. |
| Chronic (Delayed) • Refer to other in | formation found in Section 11-Toxicology. |
| Skin: | |
| Acute (Immediate) • May cause irritation. | |
| Chronic (Delayed) • Repeated and prolong | ed exposure may cause dermatitis. |
| Eye: Acute (Immediate) • May cause irritation. Chronic (Delayed) • Repeated and prolong | ed exposure may cause irritation. |
| Ingestion: Acute (Immediate) • May be harmful or fata Chronic (Delayed) • Repeated and prolong | |

• This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details.

| Carcinogenic Effects | | | | |
|---|------------|--|------------------------|--|
| | CAS | IARC | NTP | |
| Quartz | 14808-60-7 | Group 1-Carcinogenic | Known Human Carcinogen | |
| Hydrated aluminium- magnesium silicate | 12174-11-7 | Group 2B-Possible Carcinogen Group 3-Not Classifiable | Not established | |
| Asphalt | 8052-42-4 | Group 2B-Possible Carcinogen Group 3-Not Classifiable | Under Consideration | |

Section 3 - Composition/Information on Ingredients

| Hazardous Components | | | | | | | |
|--|---|--|-----------|--|--|--|--|
| Chemical Name Identifiers | | %(weight) | LD50/LC50 | Classifications According to Regulation/Directive | | | |
| Asphalt UN:NA1999 EINECS:232- 50% TO 70% >5000 mg/kg Inhalation-Rat LC50 • >94.4 WHMIS: COUNT OF COUNT | | OSHA HCS 1994: Carc.; Irrit. WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2 | | | | | |
| Mineral Spirits | CAS :8052-41-3 EINECS :232- 489-3 | 15% TO 25% | | | | | |
| Hydrated aluminium- magnesium silicate | CAS :12174-11- 7 | 10% TO 20% | | WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; STOT RE 2 | | | |
| Solvent naphtha (petroleum), light aromatic | CAS :64742-95- 6 | 5% TO 10% | | UN GHS: Asp. Tox. 1; Carc. 1B | | | |

| Cellulose | CAS :9004-34-6 EINECS :232- 674-9 | 1% TO 10% | Ingestion/Oral-Rat LD50 • >5 g/kg Inhalation-Rat LC50 • >5800 mg/m ³ 4 Hour(s) | OSHA HCS 1994: Irrit. WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 |
|--------------------------|---|-----------------|--|---|
| Quartz | CAS:14808-60- 7 EINECS:238- 878-4 | 1% TO 2% | | WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 1A; STOT RE 1 |
| 1,2,4-Trimethylbenzene | CAS :95-63-6 EINECS :202- 436-9 | 0.5% TO 1.5% | Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m ³ 4 Hour(s) Ingestion/Oral-Mouse LD50 • 6900 mg/kg | OSHA HCS 1994: Comb. Liq.; Irrit. WHMIS: Comb. Liq B3 |
| Benzene, 1,3,5-trimethyl | CAS:108-67-8 UN:UN2325 EINECS:203- 604-4 | 0.5% TO 1.5% | | |

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

- Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention immediately.
- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- **Ingestion** Call a physician or poison control center immediately. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Never give anything by mouth to an unconscious person.

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

| Extinguishing Media | Use CO2, dry chemical, or foam. |
|---------------------------------------|--|
| Unsuitable Extinguishing Media | Do not use direct stream of water. |
| Firefighting Procedures | Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and can be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. |
| Unusual Fire and Explosion Hazards | Combustible liquid. May release irritating or toxic gases, fumes, or vapors. |
| Hazardous Combustion Products | Carbon monoxide, carbon dioxide, hydrocarbons. |
| Protection of Firefighters | Firefighters should wear self-contained breathing apparatus and full protective gear. |
| Flash Point | 105°F(40.5°C) CC (Closed Cup) |
| Explosion Limits: | |
| Upper | 6 % |
| Lower | 0.9 % |
| Autoignition Temperature | No data available |

Section 6 - Accidental Release Measures

| Personal Precautions | • Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry. |
|----------------------------------|--|
| Emergency Procedures | • ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Keep unauthorized personnel away. |
| Environmental Precautions | Prevent entry into waterways, sewers, basements or confined areas. |
| Containment/Clean-up Measures | Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Use appropriate Personal Protective Equipment (PPE) |
| Prohibited Materials | Avoid contact with strong oxidizing agents and acids. |
| | |

| Handling | KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat, sparks, and flame No Smoking. Use only with adequate ventilation. |
|---|--|
| Storage | Store in a well-ventilated place. Keep container tightly closed. No open flames, no sparks and no smoking. |
| Special Packaging Materials | No data available |
| Incompatible Materials or Ignition Sources | Avoid contact with strong oxidizing agents and acids. |

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

Pictograms



- **Respiratory** In case of insufficient ventilation, wear suitable respiratory equipment. If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator.
- **Eye/Face** Wear ANSI approved safety glasses with side shields or safety goggles.
- Hands Wear chemical protective gloves made of Nitrile or Neoprene.
- **Skin/Body** Wear clothing that covers the skin to prevent skin exposure.

| General Industrial Hygiene | • Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after |
|----------------------------|--|
| Considerations | handling. When using do not smoke, eat, or drink. |

Engineering
 Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

| | Exposure Limits/Guidelines | | | | | | | |
|--------------------------|----------------------------|--------------------------------|-------------------------------|---------------------------------------|---------------------|--|--|--|
| | Result | ACGIH | Canada Ontario | Mexico | OSHA | United States - California | | |
| Cellulose (9004-34-6) | TWAs | 10 mg/m3 TWA | 10 mg/m3 TWA | 10 mg/m3 TWA LMPE-PPT | 15 mg/m3 TWA (total | 5 mg/m3 PEL (respirable fraction, listed under Particulates not otherwise regulated); 10 mg/m3 PEL (total dust, listed under Particulates not otherwise regulated) | | |
| Quartz (14808-60-7) | TWAs | 0.025 mg/m3 TWA (respirable | 0.10 mg/m3 TWA (designated | 0.1 mg/m3 TWA LMPE-PPT (respirable | Not established | 0.3 mg/m3 PEL (total dust); 0.1 mg/m3 PEL | | |

| | | fraction) | substance regulation, respirable) | fraction) | | (respirable dust) |
|--------------------------------|------|--------------|---|--------------------------|--------------------------------|-------------------------------|
| Mineral Spirits (8052-41-3) | TWAs | 100 ppm TWA | 525 mg/m3 TWA (140°C Flash aliphatic solvent) | | 500 ppm TWA; 2900 mg/m3 TWA | 100 ppm PEL; 525 mg/m3 PEL |
| Asphalt (8052-42-4) | TWAs | fraction, as | 0.5 mg/m3 TWA (fume, inhalable, as Benzene- soluble aerosol) | 5 mg/m3 TWA LMPE- PPT | Not established | 5 mg/m3 PEL (fume) |

Exposure Control Notations

ACGIH

•Asphalt (8052-42-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)) •Quartz (14808-60-7): **Carcinogens:** (A2 - Suspected Human Carcinogen)

Key to abbreviations

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

Section 9 - Physical and Chemical Properties

| Material Description | | | |
|-------------------------------------|--------------------------------------|-----------------------------------|--------------------------|
| Physical Form | Liquid | Appearance/Description | Thick black semi-liquid. |
| Color | Black | Odor | Mild Hydrocarbon. |
| Physical and Chemical Properties | Semi-liquid | | |
| General Properties | | | • |
| Boiling Point | 310 to 400 F(154.4444 to 204.4444 C) | Melting Point | No data available |
| рН | No data available | Specific Gravity/Relative Density | 1.23 Water=1 |
| Density | ~10.32 lbs/gal | Bulk Density | No data available |
| Viscosity | See TDS | | |
| Volatility | | | |
| Vapor Pressure | 2 mmHg (torr) @ 68 F(20 C) | Vapor Density | 1 Air=1 |
| Evaporation Rate | 1 Ether = 1 | VOC (Vol.) | < 300 g/L |
| Flammability | | | |
| Flash Point | 105° F(40.5556 C) CC (Closed Cup) | UEL | 6 % |
| LEL | 0.9 % | Autoignition | No data available |

Section 10 - Stability and Reactivity

Stability

• Stable under normal temperatures and pressures.

- Hazardous Polymerization
- Hazardous polymerization not indicated.Avoid contact with strong oxidizing agents and flame.
- Conditions to Avoid Incompatible Materials
- Strong oxidizers.

Hazardous Decomposition Products • Carbon monoxide, carbon dioxide and hydrocarbons.

Section 11 - Toxicological Information

| Component Name | CAS | Data |
|---|------------|--|
| Asphalt (50% TO 70%) | 8052-42-4 | Acute Toxicity: orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3 |
| Solvent naphtha (petroleum), light aromatic (5% TO 10%) | 64742-95-6 | Acute Toxicity: orl-rat LD50:8400 mg/kg |
| Cellulose (1% TO 10%) | 9004-34-6 | Acute Toxicity: orl-rat LD50:>5 gm/kg |
| 1,2,4-Trimethylbenzene (0.5% TO 1.5%) | 95-63-6 | Acute Toxicity: orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H |

Other Component Information: IARC has concluded that the following chemicals in this product are carcinogenic to humans (Group 1): silica, quartz. ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz. NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz. Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.

This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's)which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

Section 12 - Ecological Information

| Ecological Fate | No data available. |
|----------------------------------|--|
| Persistence/Degradability | No data available. |
| Bioaccumulation Potential | No data available. |
| Mobility in Soil | No data available. |

Section 13 - Disposal Considerations

Product • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transportation Information

DOT: Not restricted if shipped in containers <450L (119 gallons) Restricted if shipped in containers >450L (119 gallons)

TDG - Not Restricted under General Exemption for small container packaging. Bulk Regulated: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

IATA - International Air Transportation Association - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

Section 15 - Regulatory Information

SARA Hazard Classifications

Acute, Chronic

Risk & Safety Phrases

• California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

| State Right To Know | | | | | | |
|---|------------|-----|-----------|-----|------|--|
| Component | CAS | MA | MN | NJ | PA | |
| Asphalt | 8052-42-4 | Yes | Yes | Yes | Yes | |
| Mineral Spirits | 8052-41-3 | Yes | Yes | Yes | Yes | |
| Hydrated aluminium-magnesium silicate | 12174-11-7 | No | No | No | No | |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | No | No | No | No | |
| Cellulose | 9004-34-6 | Yes | Yes | Yes | Yes | |
| Quartz | 14808-60-7 | Yes | Yes | Yes | Yes | |
| 1,2,4-Trimethylbenzene | 95-63-6 | Yes | Yes | Yes | Yes | |
| Benzene, 1,3,5-trimethyl | 108-67-8 | Yes | No | No | No | |
| Inventory | | | | | | |
| Component | CAS | | EU EINECS | | TSCA | |
| Asphalt | 8052-42-4 | | Yes | | Yes | |
| Mineral Spirits | 8052-41-3 | | Yes | | Yes | |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | | Yes | | Yes | |
| Cellulose | 9004-34-6 | | Yes | | Yes | |

| Quartz | 14808-60-7 | Yes | Yes |
|--------------------------|------------|-----|-----|
| 1,2,4-Trimethylbenzene | 95-63-6 | Yes | Yes |
| Benzene, 1,3,5-trimethyl | 108-67-8 | Yes | Yes |

Canada

Labor

| Canada - WHMIS - Classifications of Substances |
|--|
|--|

| •Cellulose | 9004-34-6 | 1% TO 10% | Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers) |
|---|------------|--------------|--|
| •Asphalt | 8052-42-4 | 50% TO 70% | Not Listed |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.5% TO 1.5% | B3 |
| •Solvent naphtha (petroleum), light aromatic | 64742-95-6 | 5% TO 10% | B3, D2B |
| •Quartz | 14808-60-7 | 1% TO 2% | D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.) |
| Mineral Spirits | 8052-41-3 | 15% TO 25% | B3, D2B |
| Benzene, 1,3,5-trimethyl | 108-67-8 | 0.5% TO 1.5% | B3 |
| Hydrated aluminium-magnesium silicate | 12174-11-7 | 10% TO 20% | Not Listed |

United States

| U.S CERCLA/SARA - Section 313 - Emission Reporting | | | | |
|---|------------|--------------|--------------------------------|--|
| •Cellulose | 9004-34-6 | 1% TO 10% | Not Listed | |
| •Asphalt | 8052-42-4 | 50% TO 70% | Not Listed | |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.5% TO 1.5% | 1.0 % de minimis concentration | |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | 5% TO 10% | Not Listed | |
| •Quartz | 14808-60-7 | 1% TO 2% | Not Listed | |
| Mineral Spirits | 8052-41-3 | 15% TO 25% | Not Listed | |
| Benzene, 1,3,5-trimethyl | 108-67-8 | 0.5% TO 1.5% | Not Listed | |
| Hydrated aluminium-magnesium silicate | 12174-11-7 | 10% TO 20% | Not Listed | |

Section 16 - Other Information

| Prepared By | • GG Inc. |
|-------------------------------------|--|
| Last Revision Date | • 1/11/2018 |
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