

Section 1 - Product and Company Identification

Material Name	- TopShield #4 Roof Cement
Chemical Category	- Mixture
Product Code	- TS-0405
Product Description	- Black paste.
Product Use	- Repair cracks, seams and holes in roofing materials.
Synonyms	- Plastic roof and flashing cement
Manufacturer	- APOC 4161 E. 7th Avenue Tampa, FL 33605 United States
Telephone	
Technical	- 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time
Emergency	- 800-424-9300 - CHEMTREC
Emergency	- 703-527-3887 - CHEMTREC (Outside US)
Last Revision Date	- 1/11/2018

Section 2 - Hazards Identification

GHS HAZARDS AND PRECAUTIONS

SIGNAL WORD: WARNING!

Flammable liquid 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.

Prevention	Avoid breathing dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Use personal protective equipment as required. Keep out of reach of children.
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
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	- Petroleum solvent odor.
Flash Point	- 105 F(40 C)
OSHA(HCS2012)	- Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

WHMIS

- Class B - Flammable and Combustible Materials - Division 3, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A

**GHS**

- R65, R25, R36/37/38, R45
- Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
- Inhalation, Skin, Eye, Ingestion/Oral
- Lungs/Respiratory System,

Route Of Entry**Medical Conditions****Aggravated by Exposure****Potential Health Effects****Inhalation****Acute (Immediate)**

- May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.

Chronic (Delayed)

- Refer to other information found in Section 11-Toxicology.

Skin**Acute (Immediate)**

- May cause irritation.

Chronic (Delayed)

- Repeated and prolonged exposure to the skin may cause dermatitis.

Eye**Acute (Immediate)**

- May cause burning and redness or swelling of the eyes.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Ingestion**Acute (Immediate)**

- May be harmful or fatal if swallowed. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful.

Carcinogenic Effects

- 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
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients**Hazardous Components**

Chemical Name	CAS	%(wt)	UN;EINE CS	LD50/LC50	Classifications According to Regulation/Directive
Asphalt	8052-42-4	40% TO 50%	NA1999, 232-490- 9	Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m ³	WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2
mineral spirits	8052-41-3	15% TO 20%	232-489- 3		EU DSD/DPD: Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65
Calcium carbonate	1317-65-3	10% TO 20%	215-279- 6		NDA
Kaolin	1332-58-7	10% TO 20%			UN GHS: Eye Irrit. 2A; STOT RE 2 EU DSD/DPD: Irritant(Xi); R36/37

Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive
Cellulose	9004-34-6	2% TO 6%	232-674-9	Ingestion/Oral-Rat LD50 · >5 g/kg Inhalation-Rat LC50 · >5800 mg/m ³ 4 Hour(s)	WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2
Bentonite	1302-78-9	1% TO 5%	215-108-5	NDA	WHMIS: Other Toxic Effects - D2A UN GHS: STOT RE 2
1,2,4-Trimethylbenzene	95-63-6	< 1%	202-436-9	Ingestion/Oral-Rat LD50 · 5 g/kg Inhalation-Rat LC50 · 18000 mg/m ³ 4 Hour(s)	UN GHS: Acute Tox. 4 (Inhalation); Aquatic Chronic 2; Flam. Liq. 3; Eye Irrit. 2A; Skin Irrit. 2; STOT RE 2; STOT SE 2 EU DSD/DPD: R10Xn; R20Xi; R36/37/38N; R51 R53
Benzene, 1,3,5-trimethyl	108-67-8	< 1%	UN2325, 203-604-4		EU DSD/DPD: R10 Xi; R37 N; R51 R53
Surfactant	30113-45-2	< 1%	250-056-7		

Non-Hazardous Components

Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive
Water	7732-18-5	2% TO 10%	231-791-2	Ingestion/Oral-Rat LD50 · >90 mL/kg	NDA

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**
 - Move victim to fresh air. If breathing has stopped, apply artificial respiration. Get medical attention immediately.
- Skin**
 - Remove contaminated clothing and shoes. Wash the contaminated area of body with soap and fresh water. Get medical attention if symptoms occur. Wash clothing before reuse.
- Eye**
 - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately if symptoms occur.
- Ingestion**
 - Call a physician or poison control center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Section 5 - Fire Fighting Measures

- Extinguishing Media**
 - LARGE FIRE: Water spray, fog or regular foam.
 - SMALL FIRES: Dry chemical, CO₂, water spray or regular 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 are 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°C) CC (Closed Cup)
Explosion Limits	
Upper	- 6 %
Lower	- 0.9 %
Autoignition Temperature	- 450°F(232°C)


Section 6 - Accidental Release Measures

Personal Precautions	- Do not touch 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 spillage into waterways.
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). Do not use water to flush spill area.
Prohibited Materials	- Avoid contact with strong oxidizing agents and acids.

Section 7 - Handling and Storage

Handling	- KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat and ignition sources – No Smoking. Use only with adequate ventilation.
Storage	- Keep container/package tightly closed and in a well-ventilated place. Do not store and transport with oxidizers, acids, etc. Store away from sources of ignition. Keep away from fire.
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	- 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**Skin/Body****General Industrial Hygiene Considerations****Engineering Measures/Controls**

- Wear chemical protective gloves made of Nitrile or Neoprene.
- Wear clothing that covers the skin to prevent skin exposure.
- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.
- 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	Canada Ontario	NIOSH	OSHA	United States - California
1,2,4-Trimethylbenzene (95-63-6)	TWAs	Not established	25 ppm TWA; 125 mg/m ³ TWA	Not established	Not established
Benzene, 1,3,5-trimethyl (108-67-8)	TWAs	Not established	25 ppm TWA; 125 mg/m ³ TWA	Not established	Not established
Cellulose (9004-34-6)	TWAs	10 mg/m ³ TWAEV (paper fibre, total dust)	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	10 mg/m ³ PEL (total dust); 5 mg/m ³ PEL (respirable fraction)
Kaolin (1332-58-7)	TWAs	2 mg/m ³ TWAEV (containing no asbestos and less than 1% crystalline silica, respirable)	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ PEL (respirable dust, containing no asbestos fibers, < 1% crystalline silica)
Calcium carbonate (1317-65-3)	TWAs	Not established	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established
mineral spirits (8052-41-3)	TWAs	525 mg/m ³ TWAEV	350 mg/m ³ TWA	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm PEL; 525 mg/m ³ PEL
Asphalt (8052-42-4)	TWAs	0.5 mg/m ³ TWAEV (fume, inhalable, as benzene-soluble aerosol)	Not established	Not established	5 mg/m ³ PEL (fume)

Exposure Control Notations

ACGIH

- Kaolin (1332-58-7):Carcinogens:A4 - Not Classifiable as a Human Carcinogen
- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

Section 9 - Physical and Chemical Properties

Physical Form:	Liquid	Appearance/Description:	Black paste.
Color:	Black	Odor:	Petroleum solvent odor.
Odor Threshold:	Not Available	Boiling Point:	300 to 400 F(148.8889 to 204.4444 C)
Specific Gravity/Relative Density:	= 1.154 Water=1	Density:	= 9.5 lbs/gal
Solvent Solubility:	Yes	Viscosity:	Not Available
Vapor Pressure:	= 2 mmHg (torr) @ 68 F(20 C)	Vapor Density:	= 1 Air=1
VOC (Vol.):	< 250 g/L	Volatiles (Wt.):	Not relevant
Volatiles (Vol.):	Not Available	Flash Point:	105 F(40.5556 C)
Flash Point Test Type:	CC (Closed Cup)	UEL:	6 %
LEL:	.9 %	Heat of Combustion (ΔHc):	Not relevant
Autoignition:	450 F(232.2222 C)	Self-Accelerating Decomposition Temperature	Not relevant

Section 10 - Stability and Reactivity

- Stability** - Stable under normal temperatures and pressures.
- Hazardous Polymerization** - Hazardous polymerization not indicated.
- Conditions to Avoid** - Avoid contact with strong oxidizing agents and flame.
- Incompatible Materials** - Strong oxidizers and acids.
- Hazardous Decomposition Products** - Carbon monoxide, carbon dioxide and hydrocarbons.

Section 11 - Toxicological Information

Component Name	Concentration	CAS	Data
Water	2% TO 10%	7732-18-5	Acute Toxicity: ; orl-rat LD50:>90 mL/kg
Asphalt	40% TO 50%	8052-42-4	Acute Toxicity: ; ihl-hmn TDLo:10 mg/m3/5.5Y-I Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I
Kaolin	10% TO 20%	1332-58-7	Acute Toxicity: ; ihl-rat TCLo:30 mg/m3/96W-I
Cellulose	2% TO 6%	9004-34-6	Acute Toxicity: ; ihl-rat LC50:>5800 mg/m3/4H
Bentonite	1% TO 5%	1302-78-9	Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I
1,2,4-Trimethylbenzene	< 1%	95-63-6	Acute Toxicity: ; ihl-rat LC50:18000 mg/m3/4H

- Other Information** - 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 in recent studies. 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 – Department of Transportation - Not Regulated when shipped in containers <119 gallons.

TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

TDG Transportation Other Information: Not Restricted under General Exemption for small container packaging.

IMO/IMDG –International Maritime Transport - 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 Transport 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
Water	7732-18-5	No	No	No	No
Asphalt	8052-42-4	Yes	Yes	Yes	Yes
mineral spirits	8052-41-3	Yes	Yes	Yes	Yes
Calcium carbonate	1317-65-3	Yes	Yes	Yes	Yes
Kaolin	1332-58-7	Yes	Yes	Yes	Yes
Cellulose	9004-34-6	Yes	Yes	Yes	Yes
Bentonite	1302-78-9	No	No	No	No
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No	No
Surfactant	30113-45-2	No	No	No	No

Inventory			
Component	CAS	EU EINECS	TSCA
Water	7732-18-5	Yes	Yes
Asphalt	8052-42-4	Yes	Yes
mineral spirits	8052-41-3	Yes	Yes
Calcium carbonate	1317-65-3	Yes	Yes
Kaolin	1332-58-7	Yes	Yes
Cellulose	9004-34-6	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	Yes
Surfactant	30113-45-2	Yes	Yes

Canada - WHMIS - Classifications of Substances

- Kaolin	1332-58-7	10% TO 20%	D2A
- Cellulose	9004-34-6	2% TO 6%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
- Asphalt	8052-42-4	40% TO 50%	Not Listed
- 1,2,4-Trimethylbenzene	95-63-6	< 1%	B3
- Bentonite	1302-78-9	1% TO 5%	D2A
- Water	7732-18-5	2% TO 10%	Uncontrolled product according to WHMIS classification criteria
- mineral spirits	8052-41-3	15% TO 20%	B3, D2B

- Benzene, 1,3,5-trimethyl	108-67-8	< 1%	B3
- Calcium carbonate	1317-65-3	10% TO 20%	D2A
- Surfactant	30113-45-2	< 1%	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

- 1,2,4-Trimethylbenzene	95-63-6	< 1%	1.0 % de minimis concentration
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Section 16 - Other Information

- Last Revision Date** - 1/11/18
- Prepared By** - GG Inc.
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