Section 1 - Product and Company Identification

Material Name - TOP COAT
Chemical Category - Mixture

Product Code - 6125-9-30-NL

Product Description - Black fibered asphalt roof coating

Product Use - Roof Coating

Manufacturer - Pioneer Research Corporation

3110 N. 19th Ave Phoenix, AZ 85015

Telephone

Technical - (602) 230-0012

Emergency - Cemtel (800) 255-3924

Last Revision Date - 4/28/2015

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 Do not handle until all safety precautions have been read and understood. Do not breathe dust,

fume, gas, mist, vapours and/or spray. Keep away from flames and hot surfaces. - No smoking. Wear

protective gloves, clothing, and eye/face protection.

Response 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 - Mild Hydrocarbon.

Flash Point - 105°F(40.5°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





R65, R25, R36/37/38, R45

GHS - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye

Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

Route Of Entry - Inhalation, Skin, Eye, Ingestion/Oral

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 may be harmful. Repeated and prolonged

exposure to the skin may cause dermatitis.

Eye

Acute (Immediate) - May cause irritation.

Chronic (Delayed) - Repeated and prolonged exposure may cause irritation.

Ingestion

Acute (Immediate) - May be harmful or fatal if swallowed.

Chronic (Delayed) - Repeated and prolonged exposure may be harmful.

Carcinogenic Effects					
CAS IARC NTP					
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration		

Section 3 - Composition/Information on Ingredients

Hazardous Components									
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	Classifications According to Regulation/Directive	Other			
Asphalt	8052-42-4	45% TO 50%	NA1999, 232- 490-9	Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m³	WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2	NDA			
Mineral Spirits	8052-41-3	15% TO 25%	232-489-3		EU DSD/DPD: Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	NDA			
1,2,4- Trimethylbenzene	95-63-6	1% TO 5%	202-436-9	Ingestion/Oral-Rat LD50 · 5 g/kg	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	NDA			
Bentonite	1302-78-9	1% TO 5%	215-108-5		WHMIS: Other Toxic Effects - D2A UN GHS: STOT RE 2	NDA			
Benzene, 1,3,5- trimethyl	108-67-8	1% TO 5%	UN2325, 203- 604-4		EU DSD/DPD: R10 Xi; R37 N; R51 R53	NDA			
Cellulose	9004-34-6	1% TO 5%	232-674-9	Ingestion/Oral-Rat LD50 · >5 g/kgInhalation-Rat LC50 · >5800 mg/m³ 4 Hour(s)	WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD:	NDA			
			Non-Haz	zardous Components					
Chemical Name	CAS	%(wt)	UN;EINECS	LD50/LC50	EU R & S Phrases	Other			
Water	7732-18-5	25% TO 30%	231-791-2		NDA	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.

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See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

Skin

Eye

Inhalation- Move victim to fresh air. Call a physician or poison control center immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

 Immediately flush skin with soap and plenty of water. Call a physician if symptoms occur. Remove contaminated clothing and shoes. Wash contaminated clothing

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

- If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person.

Notes to Physician

- Aspiration of liquid into the lungs during swallowing or vomiting can cause lung inflammation, serious lung damage and even death from chemical pneumonitis.

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.

Media 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. Containers may explode when heated. May release irritating or toxic gases, fumes, or vapors.

Hazardous Combustion

- Carbon monoxide, carbon dioxide, hydrocarbons.

Products
Protection of Firefighters

 Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

-----**-**-----

- 105°F(41°C) CC (Closed Cup)

Explosion Limits

Flash Point

Upper - 6 % **Lower** - .9 %

Autoignition Temperature - 450°F(232°C)

Section 6 - Accidental Release Measures

Personal Precautions

- If you have not donned special protective clothing approved for this material, do not perform containment activities. Stay upwind to prevent exposure to vapors.

Ventilate the area before entry.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) 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.

Environmental Precautions
Containment/Clean-up
Measures

- Prevent entry into waterways, sewers, basements or confined areas.

 Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not flush to sewer or allow entering waterways. Do not use water to flush spill area.
 Use appropriate Personal Protective Equipment (PPE).

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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. Keep away from fire - No Smoking. Do not use in areas without adequate ventilation. Protect building inlet ventilation from product fumes. Store in a well-ventilated place. Keep container tightly closed. No open flames, no

Storage

No data available

sparks and no smoking.

Special Packaging Materials 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 respirtory protection suitable for the hazard.

Eye/Face Hands

Wear ANSI approved safety glasses with side shields or safety goggles.

Skin/Body **General Industrial Hygiene** Wear chemical protective gloves made of Nitrile or Neoprene. Wear clothing that covers the skin to prevent skin exposure.

Considerations **Engineering** Measures/Controls Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Avoid breathing vapors.

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	OSHA	United States - California			
Cellulose (9004-34-6)	TWAs	10 mg/m3 TWA	10 mg/m3 TWAEV (paper fibre, total dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction)			
Mineral Spirits (8052-41-3)	TWAs	100 ppm TWA	525 mg/m3 TWAEV	500 ppm TWA; 2900 mg/m3 TWA	100 ppm PEL; 525 mg/m3 PEL			
Asphalt (8052-42-4)	TWAs	0.5 mg/m3 TWA (as benzene soluble aerosol, fume, inhalable fraction)	0.5 mg/m3 TWAEV (fume, inhalable, as benzene-soluble aerosol)	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)

Key to abbreviations

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

TWA Time-Weighted Averages are based on 8h/day, 40h/week exposures

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Section 9 - Physical and Chemical Properties

Physical Form - Liquid

Appearance/Description - Thick black semi-liquid.

Color: Black		Odor: Mild Hydrocarbon.			
Boiling Point:	315 to 550 F(157.2222 to 287.7778 C)	Vapor Pressure:	= 2 mmHg (torr) @ 68 F(20 C)		
Melting Point:	NDA	Vapor Density:	= 4.9 Air=1		
Specific Gravity/Relative Density:	= 0.98 Water=1	Evaporation Rate:	NDA		
Density:	= 8.1781 lbs/gal	VOC (Wt.):	NDA		
Bulk Density:	NDA	VOC (Vol.):	< 250 g/L		
Solvent Solubility:	NDA	Flash Point:	105°F(40.5° C)		
Viscosity:	= 270 Centipoise (cPs, cP) or mPas @ 140 F(60 C)	Flash Point Test Type:	CC (Closed Cup)		

Section 10 - Stability and Reactivity

Stability

Hazardous Polymerization

Conditions to Avoid

Incompatible Materials

Hazardous Decomposition

Products

Stable under normal temperatures and pressures.

Hazardous polymerization not indicated.

- Avoid contact with strong oxidizing agents and flame.

Strong oxidizers and acids.

Carbon monoxide, carbon dioxide and hydrocarbons.

Section 11 - Toxicological Information

Component Name	Concentration	CAS	Data
Asphalt 45% TO 50% 8052		8052-42-4	Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3 Tumorigen/Carcinogen: ; skn-mus TD :69 gm/kg/43W-l
Bentonite	1% TO 5%	1302-78-9	Acute Toxicity: ; orl-mus TDLo:14 gm/kg/7D-I; orl-rat TDLo:700 mg/kg/7D-I Tumorigen/Carcinogen: ; orl-mus TDLo:12000 gm/kg/28W-C
Benzene, 1,3,5-trimethyl	1% TO 5%	108-67-8	Acute Toxicity: ; orl-rat LD50:5000 mg/kg; ihl-hmn TCLo:10 ppm Irritation: ; skn-rbt 20 mg/24H MOD
Cellulose	1% TO 5%	9004-34-6	Acute Toxicity: ; orl-rat LD50:>5 gm/kg; ihl-rat LC50:>5800 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.

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.

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Section 12 - Ecological Information

Ecological Fate-No data availablePersistence/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 - United States - Department of Transportation

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

TDG - Canada - Transportation of Dangerous Goods - Not Restricted under General Exemption for small container packaging. TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

IMO/IMDG -International Maritime Transport

Shipping Name: Tars liquid

ID Number: UN1999 Hazard Class: 3 Labeling Class: 3 Packing Group: III

IMO/IMDG Transportation Other Information IMDG Code 2.3.2.5 - exempted from marking,

labeling & testing of packages.

IATA - International Air Transport Association

Shipping Name: Tars liquid

ID Number: UN1999 Hazard Class: 3 Labeling Class: 3 Packing Group: III

Section 15 - Regulatory Information

SARA Hazard Classifications

Risk & Safety Phrases

- Acute, Chronic
- 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	NJ	PA		
Water	NDA	No	No	No		
Asphalt	8052-42-4	Yes	Yes	Yes		
Mineral Spirits	8052-41-3	Yes	Yes	Yes		
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes		
Bentonite	1302-78-9	No	No	No		
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No		

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State Right To Know						
Component CAS MA NJ PA						
Cellulose	9004-34-6	Yes	Yes	Yes		

Inventory					
Component	CAS	TSCA			
Asphalt	8052-42-4	Yes			
Mineral Spirits	8052-41-3	Yes			
1,2,4-Trimethylbenzene	95-63-6	Yes			
Bentonite	1302-78-9	Yes			
Benzene, 1,3,5-trimethyl	108-67-8	Yes			
Cellulose	9004-34-6	Yes			

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Cellulose	9004-34-6	1% TO 5%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
- Asphalt	8052-42-4	45% TO 50%	Not Listed
Bentonite	1302-78-9	1% TO 5%	D2A
Mineral Spirits	8052-41-3	15% TO 25%	B3, D2B
Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	B3

United States

Environment

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

• Cellulose	9004-34-6	1% TO 5%	Not Listed
- Asphalt	8052-42-4	45% TO 50%	Not Listed
• Bentonite	1302-78-9	1% TO 5%	Not Listed
Mineral Spirits	8052-41-3	15% TO 25%	Not Listed
Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Cellulose	9004-34-6	1% TO 5%	Not Listed
Asphalt	8052-42-4	45% TO 50%	Not Listed
Bentonite	1302-78-9	1% TO 5%	Not Listed
Mineral Spirits	8052-41-3	15% TO 25%	Not Listed
Benzene, 1,3,5-trimethyl	108-67-8	1% TO 5%	Not Listed

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Section 16 - Other Information

Last Revision Date Prepared By Disclaimer/Statement of Liability

- 4/28/2015
- Gardner-Gibson
- This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.



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