



October 23, 2017

Robin Kerns, AICP
Planner
7787 E 60th Avenue
Commerce City, CO 80222

RE: Project Narrative - **UPDATED**
Blue Sky, LLC
CU-113-17, 4308 E. 60th Ave.
Commerce City, CO

Dear Mr. Kerns,

MMW AIA, is submitting this request for a Conditional Use Permit (CUP) on behalf of Blue Sky LLC on the above referenced property. Blue Sky LLC is proposing to develop this property for a new, Warehousing and Distribution facility for Roofing products. The property is currently undeveloped, and Zoned I-3. All adjacent properties are currently developed with heavy industrial uses and I-3 zoning. The lot is 2.221ac in size with a proposed building footprint of 11,250 sf, and a total building area of 13,025 sf. The Building is a customized pre-fabricated building with architectural enhancements to meet City code. There are 2 on-site designated outdoor storage areas of 5,793 sf, and 4 on-site storage tanks with a maximum capacity of 12,000 gallons each, for a total capacity of 48,000 gallons. The facility will be secured by a 7-foot chain link fence with access via automatic gates. All driveways and access will be a new paved surface, storage areas will be recycled asphalt, and new Landscaping and Site lighting will be provided. The normal hours of operation will be Monday – Friday, 7:00am – 5:00pm, with 9 estimated full-time employees.

The property is generally flat, and located entirely within the floodplain of Sand Creek, and will require a Floodplain Development Permit be approved by the City as part of the Building plan/Civil Construction plan approval process. The design of the project has anticipated construction in the floodplain, and has established building finished floor elevation 2 feet above the published floodplain elevation and the tank storage area has been designed to be 2 feet above this elevation with an additional 2-foot containment area as required by code. The development also provides for the construction of a new detention/retention facility to handle all new developed drainage flows.

All materials and products planned to be stored onsite in the warehouse, storage yards, and storage tanks are provided in the following table, and are identified as Hazardous or Non-Hazardous per the information provided on the attached MSDS or product cut sheets.

Blue Sky, LLC- Storage Products		
Hazardous	Non-Hazardous	
Warehouse Storage Materials		
X		Suncor PG Conventional Asphalt (1) 64-22
X		Suncor Industrial Asphalt Oxidizing Flux
X		Hydrochloric Acid
	X	Wood Fiberboard Products
	X	PTS Butex
	X	Polypropylene Strapping
	X	OH Sleeves/Cartons
	X	Wood Pallets
	X	Polyethylene Bag
Storage Yard Materials		
	X	Wood Fiberboard Products
	X	PTS Butex
	X	Polypropylene Strapping
	X	OH Sleeves/Cartons
	X	Wood Pallets
	X	Polyethylene Bag
Storage Tank Materials		
X		Suncor PG Conventional Asphalt (1) 64-22
X		Suncor Industrial Asphalt Oxidizing Flux

Should additional information be required, please feel free to contact me.

Sincerely,



Steve Wilson
Project Manager
MMW, AIA

CC: Brad Lorenzen, Blue Sky, LLC



555 17th Street, Suite 1100
Denver, Colorado 80202
tel: 303 383-2300
fax: 303 383-2429

October 30, 2015

City of Commerce City
8602 Rosemary St.
Commerce City, CO 80022-5053
Attn: Robin Kerns

Subject: Request for Conditional Use Permit for 4308 E 60th Avenue Commerce City, CO
80022

Dear Mr. Kerns,

CDM Smith is submitting a request on behalf of Blue Sky, LLC for a Conditional Use Permit (CUP) for 4308 E. 60th Avenue Commerce City, CO 80022. Blue Sky, LLC is the owner of this property. Blue Sky, LLC's sister company, United Asphalts, has been a manufacturer of high quality roofing asphalts since 1960. United Asphalts manufactures and sells No Smell Asphalt, made with an additive that suppresses the smell of regular asphalt. No Smell Asphalt is ideal for hospitals, schools and other facilities which cannot be closed during a roofing project and must be able to maintain normal business operations.

Blue Sky, LLC is proposing to improve this property, including constructing new storage tanks, constructing new storage facilities, and constructing a new office building.

The proposed improvements to 4308 E. 60th Avenue are in compliance with the purpose, goals, and objectives of the Comprehensive Plan developed by the City of Commerce City. The property is already zoned for industrial land use, and this will not be changed by the improvements. Blue Sky LLC and United Asphalts are a valuable member of the Commerce City business community, and these improvements will facilitate ongoing business. These improvements will not have any effects on adjacent properties, public improvements, and city services.

The site is 2.2 acres, and is located Southwest quarter of Section 7, Township 3 South, Range 67 West. It is bounded by Sand Creek on the South and West, Interstate 270 to the North, and Vasquez Boulevard to the East. See Figure 1 – Vicinity Map for the exact location of the site. The site is generally flat, except for a berm that separates an existing regional trail from the property. This property is located entirely within the floodplain of Sand Creek. Therefore a floodplain development permit will be submitted along with a building permit application when construction documents are ready for review and approval by the City.





Mr. Robin Kerns
October 30, 2015
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Interior landscaping is included and will conform to Commerce City's code. Adjacent zoning and land use is heavy industrial, and thus no buffer landscaping is needed. No noise, dust, vibrations, odor, or other nuisances outside of those allowed under the performance standards for heavy industrial zoning will occur.

Blue Sky, LLC and United Asphalts are valuable members of the Commerce City business community, and these improvements will facilitate ongoing business.

Please do not hesitate to call me at 303-383-2300 or Brad Lorenzen at 303-287-5431 if you would like to discuss this information in more detail, or if you would like to set-up a time to meet in person.

Sincerely,

A handwritten signature in blue ink that reads "Brian Murphy".

Brian Murphy, P.E.
Principal Engineer/Project Manager
CDM Smith

Cc: Brad Lorenzen, United Asphalts

Attachments: Figure 1 – Project Location



SAFETY DATA SHEET**SECTION 1:****PRODUCT AND COMPANY IDENTIFICATION****Hydrochloric Acid, 31 – 36%**

Product Name: Hydrochloric Acid, 31 – 36.7%

Identified Uses: acid etching, steel pickling, oil and gas, ore and mineral, food processing, pharmaceutical, organic chemical synthesis

Company Information:

ASHTA Chemicals Inc.

P.O. Box 858

Ashtabula Ohio 44005

Phone: (440) 997-5221

Fax: (440) 998-0286

24-hour Emergency Phone: CHEMTREC: (800) 424-9300

SECTION 2:**HAZARDS IDENTIFICATION**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS label elements, including precautionary statements:

Signal Word: Danger

Pictogram(s):

**Hazard Statements**

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary Statements

P234	Keep only in original container.
P261	Avoid breathing dust/ fume/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower.



P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P403 + P233	Store in a well-ventilated place. Keep container with a resistant inner liner.
P405	Store locked up.
P406	Store in corrosive resistant stainless steel container with a resistant inner liner.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3:

COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

CHEMICAL NAME:

Hydrochloric acid

TRADE NAME:

Hydrochloric acid, 31 – 36%

SYNONYMS:

Muriatic acid, Chlorohydric acid, Hydrogen Chloride

C.A.S:

7647-01-0

EC:

231-595-7

WHMIS:

D2A, E

CHEMICAL FORMULA:

HCl (in aqueous solution)

CHEMICAL FAMILY:

Inorganic Acid

SECTION 4

FIRST AID MEASURES

Description of first aid measures:

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give humidified air. Give oxygen, but only by a certified physician. Consult a physician.

In case of skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses if present and easy to do. Continue rinsing eyes during transport to medical facility.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Consult a physician.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point (Method):	Non-combustible.
Extinguishing Media:	Use extinguishing agents compatible with acid and appropriate for the burning material. Use water spray to keep fire-exposed containers cool.
Auto Ignition Temp:	Non-combustible.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and full protective clothing. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.
Unusual Fire/Explosion Hazards:	Releases flammable hydrogen gas when reacting with metals.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions:

Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Avoid discharge into drains, water courses or onto the ground.

Containment and Cleaning:

Follow preplanned emergency procedures. Only properly equipped, trained, functional personnel should attempt to contain a leak. All other personnel should be evacuated from the danger area. Using full protective equipment, apply appropriate emergency device or other securement technology to stop the leak if possible.

Small Spill:	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: neutralize the residue with a dilute solution of sodium carbonate.
Large Spill:	Corrosive liquid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to knock down vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that vapor is not present at a concentration level above TLV.

SECTION 7: HANDLING AND STORAGE

Precautions to be taken for handling and storage:

Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breathe mist or vapor. Observe good industrial hygiene practices. Do not empty into drains. Use caution when combining with water; DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes. Store in a well-ventilated place. Store away from incompatible materials. Store closed containers in a clean, cool, open or well ventilated area. Keep out of sun.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Principal Component: Hydrochloric Acid

Occupational Exposure Limits:

Regulatory Limits:

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Hydrochloric Acid Mixture	---	---	5 ppm 7.59 mg/m ³

ACGIH TLV = 5 ppm (7.59 mg/m³) TWA

NIOSH IDLH = 50 ppm (as HCl, 2010)

Exposure Controls:

Eye Protection:

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Respiratory Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protection:

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Ventilation Recommended:

Exhaust ventilation is required to meet PEL limits.

Glove Type Recommended:

Wear neoprene, nitrile, butyl rubber or PVC gloves to prevent exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance	Colorless to light yellow liquid
Odor	Pungent (irritating/strong)
Odor Threshold	0.3ppm (can cause olfactory fatigue)
pH	<1 (in aqueous solution)
Melting point/freezing point	-30°C (-22°F)
Initial boiling point	>100°C (>212°F)
Flash point	Not applicable
Auto-ignition Temp	Not applicable
Evaporation rate	No data available

Decomposition temperature	No data available
Flammability (solid, gas)	Not combustible
Upper/lower flammability or explosive limits	Not combustible
Water solubility	100%
Molecular Weight	36.46
Relative Density (Specific Gravity)	1.16 (32% HCl solution) 1.19 (36.5% HCl solution)
Bulk Density	8.75 lbs/gal (32% HCl solution) 9.83 lbs/gal (36.5% HCl solution)
Vapor Density (air = 1)	1.267 at 20 °C
Vapor Pressure	84 mm Hg @ 20°C
Partition Coefficient: n-octanol/water	No data available

SECTION 10: STABILITY AND REACTIVITY

Stability:	Hydrochloric acid is stable under normal conditions and pressures.
Conditions to avoid:	Incompatible materials, metals, excess heat, bases.
Incompatibility:	Bases, amines, metals, permanganates, (e.g. potassium permanganate), fluorine, metal acetylides, hexalithium disilicide.
Hazardous decomposition products:	Hydrogen chloride, chlorine, hydrogen gas.
Polymerization:	Hazardous polymerization WILL NOT occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation:	Vapors and mist will irritate throat and respiratory system and cause coughing.
Skin contact:	Causes skin burns.
Eye contact:	Causes eye burns.
Ingestion:	Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics:

Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects:

Acute toxicity:	Harmful if swallowed.
Skin corrosion/irritation:	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation:	Causes serious eye damage.
Respiratory sensitization:	Not available.



Skin sensitization:	No data available.
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.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure:	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure:	No data available.
Aspiration hazard:	Not available.
Chronic effects:	Prolonged inhalation may be harmful.

Components Species Test Results:

Hydrochloric acid (CAS# 7647-01-0)

Rat - Inhalation LC ₅₀ :	3124 ppm, (1 hour)
Rabbit - Dermal LD ₅₀ :	5010 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Because of the low pH of this product, it would be expected produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Aquatic Toxicity:	This material is toxic to fish and aquatic organisms. Most aquatic species do not tolerate pH lower than 5.5 for any extended period.
Fish Toxicity:	Fish LC ₅₀ Mosquito fish: 282 mg/l, 96 hours Fish LC ₅₀ Bluegill: 3.6 mg/l, 48 hours
Persistence and degradability:	Not biodegradable. Hydrochloric acid will likely be neutralized to chloride by alkalinity present in natural environment..
Bioaccumulative Potential:	No data available.
Mobility in soil:	Hydrochloric acid will be neutralized by naturally occurring alkalinity. The acid will permeate soil, dissolving some soil material and will then neutralize.
Other adverse effects:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

SECTION 13: DISPOSAL CONSIDERATIONS

Collect and reclaim or dispose in sealed containers at a properly licensed waste disposal site. This material, if not neutralized, must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national or international regulations.



SECTION 14: TRANSPORT INFORMATION

Shipping:

Usual Shipping Containers:	Tank cars, bulk tankers.
Usual Shelf Life:	Indefinite (life of containers).
Storage/Transport Temperatures:	Ambient.

Suitable Storage:

Materials/Coatings: Teflon, Tygon, Rubber, PVC and polypropylene materials.

D.O.T. Information:

Labeling:	Corrosive
D.O.T. Identification Number	UN 1789
D.O.T. Shipping Name:	Hydrochloric Acid
Hazard Class:	8
Packing Group:	II
Hazard Guide:	157
Placard:	UN 1789

SECTION 15 REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Hydrochloric Acid	CAS#: 7647-01-0
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SARA 311/312 Hazards

Acute health hazard, reactive hazard.

Massachusetts Right To Know Components

Hydrochloric Acid	CAS#: 7647-01-0
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Pennsylvania Right To Know Components

Hydrochloric Acid	CAS#: 7647-01-0
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New Jersey Right To Know Components

Hydrochloric Acid	CAS#: 7647-01-0
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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

OSHA PSM/RMP Threshold for Accidental Release:

CAS# 7647-01-0 is regulated under OSHA PSM *only* if anhydrous HCl.

CAS# 7647-01-0 is regulated under EPA RMP *only* if $\geq 37\%$ HCl.

**Toxic Substances Control Act (TSCA):**

Hydrochloric Acid

CAS#: 7647-01-0

Comprehensive Environmental Response Compensation Liability Act: (CERCLA)

Hydrochloric Acid

CAS#: 7647-01-0

SECTION 16**OTHER INFORMATION****NFPA Rating:**

Health hazard: 3

Fire Hazard: 0

Reactivity Hazard: 1

This information is drawn from recognized sources believed to be reliable. ASHTA Chemicals, Inc. Makes no guarantees or assumes any liability in connection with this information. The user should be aware of changing technology, research, regulations, and analytical procedures that may require changes herein. The above data is supplied upon the condition that persons will evaluate this information and then determine its suitability for their use. Only U.S.A regulations apply to the above.

Version 1.0	For the new GHS SDS Standard
Version 1.1	Graphics updated
Version 1.2	Title updated
Version 1.3	Section 9 changes
Version 1.4	Section 1, 15 changes

Revision Date: 12/31/2014

Revision Date: 3/9/2015

Revision Date: 6/2/2015

Revision Date: 7/30/2015

Revision Date: 4/15/2016

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



000003001351

Version 3.0

Revision Date 2016/09/21

Print Date 2016/09/21

SECTION 1. IDENTIFICATION

Product name : PERFORMANCE GRADE CONVENTIONAL ASPHALT

Synonyms : PG52-34, PG58-28, PG64-22, ASPHALT CEMENT

Product code : 101861, 101860, 101859

Manufacturer or supplier's details

SUNCOR ENERGY INC.
P.O. Box 2844, 150 - 6th Avenue South-West
Calgary Alberta T2P 3E3
Canada

Emergency telephone number : Suncor Energy: +1 403-296-3000;
Canutec Transportation: 1-888- 226-8832 (toll-free) or 613-996-6666;
Poison Control Centre: Consult local telephone directory for emergency number(s).

Recommended use of the chemical and restrictions on use

Recommended use : Performance Grade Asphalts are used for paving applications.

Prepared by : Product Safety: +1 905-804-4752

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Highly viscous semi-solid.
Colour	black
Odour	Characteristic asphaltic odour or "rotten egg" odour if H ₂ S present, but odour is an unreliable warning, since it may deaden the sense of smell.

GHS Classification

Carcinogenicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Suspected of causing cancer.

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



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Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF exposed or concerned: Get medical advice/ attention.
Storage:
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Primary Routes of Entry : Eye contact
Ingestion
Inhalation
Skin contact

Inhalation : Inhalation may cause central nervous system effects.
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
In high doses hydrogen sulphide may produce pulmonary edema and respiratory depression or paralysis.

Skin : May cause skin irritation.
Contact with hot product will cause thermal burns.

Eyes : May cause eye irritation.

Ingestion : No known significant effects or critical hazards.

Chronic Exposure : Occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans.

Aggravated Medical Condition : Frequent or prolonged contact may irritate the skin and cause inflammation (dermatitis).

Other hazards

None known.

IARC

Group 2B: Possibly carcinogenic to humans

Asphalt

8052-42-4

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



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by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration
Asphalt	8052-42-4	100 %

NOTE: During storage or transit of hot asphalt, hydrogen sulphide may be generated.

SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.
- In case of skin contact : For hot asphalt splash, cool affected body part with water immersion or shower. Do not attempt removal of asphalt but split longitudinally if circumferential to avoid tourniquet effect. No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provide a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of eyes.
- In case of eye contact : Remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.
- If swallowed : Rinse mouth with water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
Seek medical advice.
- Most important symptoms and effects, both acute and delayed : First aider needs to protect himself.
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician : No specific treatment.
Treat symptomatically.
For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No information available.
- Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : Carbon oxides (CO, CO₂), nitrogen oxides (NO_x), sulphur oxides (SO_x), sulphur compounds (H₂S), smoke and irritating vapours as products of incomplete combustion.
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and full protective wear.
Wear a positive-pressure supplied-air respirator with full face-piece.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Material can create slippery conditions.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.
Remove all sources of ignition.
Soak up with inert absorbent material.
Ensure adequate ventilation.
Contact the proper local authorities.
-

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Do not ingest.
Avoid contact with skin, eyes and clothing.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Keep away from heat and sources of ignition.

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



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Keep container closed when not in use.

Do not breathe fumes, vapour.

Asphalt may be transported warm. During storage, transit and cooling of asphalt, solvent vapour and hydrogen sulphide may accumulate in enclosed spaces such as tank cars. Open tank car hatches with caution. Maintain same precautions when gauging and sampling.

Conditions for safe storage : Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in a dry, cool and well-ventilated place.
Keep in properly labelled containers.
To maintain product quality, do not store in heat or direct sunlight.
To maintain pumping ability, asphalt is kept heated to a suitable temperature, normally well above room temperature but below the flash point. Clear roof vents periodically to prevent accumulation of asphalt deposits from vapour accumulation.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Asphalt	8052-42-4	TWA (Fume, inhalable fraction)	0.5 mg/m ³ (benzene soluble aerosol)	ACGIH
		C (Fumes)	5 mg/m ³	NIOSH REL
		PEL (Fumes)	5 mg/m ³	CAL PEL
hydrogen sulphide	7783-06-4	TWA	1 ppm	ACGIH
		STEL	5 ppm	ACGIH
		C	10 ppm 15 mg/m ³	NIOSH REL
		CEIL	20 ppm	OSHA Z-2
		Peak	50 ppm (10 minutes once only if no other measured exposure occurs)	OSHA Z-2
		TWA	10 ppm 14 mg/m ³	OSHA P0
		STEL	15 ppm 21 mg/m ³	OSHA P0
		STEL	15 ppm 21 mg/m ³	CAL PEL
		C	50 ppm	CAL PEL
		PEL	10 ppm 14 mg/m ³	CAL PEL

Engineering measures : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



000003001351

Version 3.0

Revision Date 2016/09/21

Print Date 2016/09/21

Personal protective equipment

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Filter type** : organic vapour filter cartridge or canister with a dust, fume or mist filter (R, or P series) may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited.
- Hand protection**
Material : polyvinyl alcohol (PVA), Viton(R). When handling hot product ensure gloves are heat resistant and insulated.
- Remarks** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
- Eye protection** : Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
- Protective measures** : Wash contaminated clothing before re-use.
- Hygiene measures** : Remove and wash contaminated clothing and gloves, including the inside, before re-use.
Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Highly viscous semi-solid.
- Colour** : black
- Odour** : Characteristic asphaltic odour or "rotten egg" odour if H₂S present, but odour is an unreliable warning, since it may deaden the sense of smell.
- Odour Threshold** : No data available

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PERFORMANCE GRADE CONVENTIONAL ASPHALT



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pH	: No data available
Softening point	: Not applicable
Boiling point/boiling range	: 470 °C (878 °F)
Flash point	: > 230 °C (446 °F) Method: Cleveland open cup
Fire Point	: No data available
Auto-Ignition Temperature	: > 370 °C (> 698 °F)
Evaporation rate	: No data available
Flammability	: Low fire hazard. This material must be heated before ignition will occur. Hydrogen sulphide may be released if the product is overheated and may accumulate in the tank headspace or any other confined space.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: > 1 kg/l (15 °C / 59 °F)
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, dynamic	: 400 - 2,600 Poise (60 °C)
Viscosity, kinematic	: 190 - 470 cSt (135 °C / 275 °F)
Explosive properties	: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Container explosion may occur under fire conditions or when heated.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Hazardous polymerisation does not occur.
Stable under normal conditions.

Conditions to avoid : No data available

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT



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Incompatible materials : Reactive with oxidising agents.

Hazardous decomposition products : May release COx, NOx, SOx, POx, H2S, hydrocarbons, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:

Asphalt:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Skin corrosion/irritation

Product:

Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

SAFETY DATA SHEET

PERFORMANCE GRADE CONVENTIONAL ASPHALT

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STOT - repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :
Remarks: No data available

Toxicity to algae :
Remarks: No data available

Toxicity to bacteria : Remarks: No data available

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

Contaminated packaging : Do not re-use empty containers.

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PERFORMANCE GRADE CONVENTIONAL ASPHALT



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SECTION 14. TRANSPORT INFORMATION

International Regulations

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID/NA number : UN 3257

Proper shipping name : Elevated temperature liquid, n.o.s.

Class : 9

Packing group : III

Labels : Class 9 - Miscellaneous Dangerous Goods

ERG Code : 128

Marine pollutant : no

Note: If this product is being transported as a solidified product or sample, it is Not Regulated under IATA.

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

DSL

On the inventory, or in compliance with the inventory

TSCA

All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

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PERFORMANCE GRADE CONVENTIONAL ASPHALT

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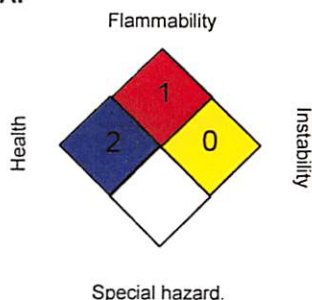
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SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

For Copy of SDS

: Internet: www.petro-canada.ca/msds
Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228
For Product Safety Information: 1 905-804-4752

Prepared by

: Product Safety: +1 905-804-4752

Revision Date

: 2016/09/21

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.

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INDUSTRIAL ASPHALT OXIDIZING FLUX 1500, 2000



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SECTION 1. IDENTIFICATION

Product name : INDUSTRIAL ASPHALT OXIDIZING FLUX 1500, 2000

Product code : 100090, 101865, 101864

Manufacturer or supplier's details

SUNCOR ENERGY INC.
P.O. Box 2844, 150 - 6th Avenue South-West
Calgary Alberta T2P 3E3
Canada

Emergency telephone number

Suncor Energy: +1 403-296-3000;
Canutec Transportation: 1-888- 226-8832 (toll-free) or 613-996-6666;
Poison Control Centre: Consult local telephone directory for emergency number(s).

Recommended use of the chemical and restrictions on use

Recommended use : Industrial Asphalt Oxidizing Fluxes are used as intermediates for production of oxidized industrial asphalt, as saturants and other industrial uses.

Prepared by : Product Safety: +1 905-804-4752

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Highly viscous semi-solid.
Colour	black
Odour	Characteristic asphaltic odour or "rotten egg" odour if H ₂ S present, but odour is an unreliable warning, since it may deaden the sense of smell.

GHS Classification

Carcinogenicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Suspected of causing cancer.

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Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF exposed or concerned: Get medical advice/ attention.
Storage:
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Primary Routes of Entry : Eye contact
Ingestion
Inhalation
Skin contact

Inhalation : Inhalation may cause central nervous system effects.
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
In high doses hydrogen sulphide may produce pulmonary edema and respiratory depression or paralysis.

Skin : May cause skin irritation.
Contact with hot product will cause thermal burns.

Eyes : May cause eye irritation.

Ingestion : No known significant effects or critical hazards.

Chronic Exposure : Occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans.
Frequent or prolonged contact may irritate the skin and cause inflammation (dermatitis).

Aggravated Medical Condition : None known.

Other hazards

None known.

IARC

Group 2B: Possibly carcinogenic to humans

Asphalt

8052-42-4

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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INDUSTRIAL ASPHALT OXIDIZING FLUX 1500, 2000



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NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration
Asphalt	8052-42-4	100 %

NOTE: During storage or transit of hot asphalt, hydrogen sulphide may be generated.

SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.
- In case of skin contact : For hot asphalt splash, cool affected body part with water immersion or shower. Do not attempt removal of asphalt but split longitudinally if circumferential to avoid tourniquet effect. No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provide a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of eyes.
- In case of eye contact : Remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.
- If swallowed : Rinse mouth with water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
Seek medical advice.
- Most important symptoms and effects, both acute and delayed : First aider needs to protect himself.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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Unsuitable extinguishing media	: No information available.
Specific hazards during fire-fighting	: Cool closed containers exposed to fire with water spray.
Hazardous combustion products	: Carbon oxides (CO, CO ₂), nitrogen oxides (NO _x), sulphur oxides (SO _x), smoke and irritating vapours as products of incomplete combustion.
Further information	: Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
Environmental precautions	: If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Keep container closed when not in use. Do not breathe fumes, vapour. Asphalt may be transported warm. During storage, transit and cooling of asphalt, solvent vapour and hydrogen sulphide may accumulate in enclosed spaces such as tank cars. Open tank car hatches with caution. Maintain same precautions when gauging and sampling.
Conditions for safe storage	: Store in original container.

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Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Keep in a dry, cool and well-ventilated place.
 Keep in properly labelled containers.
 To maintain product quality, do not store in heat or direct sunlight.
 To maintain pumping ability, asphalt is kept heated to a suitable temperature, normally well above room temperature but below the flash point. Clear roof vents periodically to prevent accumulation of asphalt deposits from vapour accumulation.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Asphalt	8052-42-4	TWA (Fume, inhalable fraction)	0.5 mg/m ³ (benzene soluble aerosol)	ACGIH
		C (Fumes)	5 mg/m ³	NIOSH REL
		PEL (Fumes)	5 mg/m ³	CAL PEL
hydrogen sulphide	7783-06-4	TWA	1 ppm	ACGIH
		STEL	5 ppm	ACGIH
		C	10 ppm 15 mg/m ³	NIOSH REL
		CEIL	20 ppm	OSHA Z-2
		Peak	50 ppm (10 minutes once only if no other measured exposure occurs)	OSHA Z-2
		TWA	10 ppm 14 mg/m ³	OSHA P0
		STEL	15 ppm 21 mg/m ³	OSHA P0
		STEL	15 ppm 21 mg/m ³	CAL PEL
		C	50 ppm	CAL PEL
		PEL	10 ppm 14 mg/m ³	CAL PEL

Engineering measures : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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Filter type	: organic vapour filter cartridge or canister with a dust, fume or mist filter (R, or P series) may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited.
Hand protection Material	: polyvinyl alcohol (PVA), Viton(R). When handling hot product ensure gloves are heat resistant and insulated.
Remarks	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Highly viscous semi-solid.
Colour	: black
Odour	: Characteristic asphaltic odour or "rotten egg" odour if H ₂ S present, but odour is an unreliable warning, since it may deaden the sense of smell.
Odour Threshold	: No data available
pH	: No data available
Pour point	: No data available
Boiling point/boiling range	: > 470 °C (> 878 °F)
Flash point	: > 271 °C (520 °F) Method: Cleveland open cup
Auto-Ignition Temperature	: No data available
Evaporation rate	: No data available
Flammability	: Low fire hazard. This material must be heated before ignition will occur.

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: 1 - 1.035
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 1250 - 2400 cSt (100 °C / 212 °F)
Explosive properties	: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	: No data available
Incompatible materials	: Reactive with oxidising agents.
Hazardous decomposition products	: May release COx, NOx, SOx, H2S, hydrocarbons, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity	: Remarks: No data available
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: Remarks: No data available

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Components:

Asphalt:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Skin corrosion/irritation

Product:

Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Remarks: No data available

Persistence and degradability

Product:

Internet: www.petro-canada.ca/msds

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Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

Contaminated packaging : Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID/NA number : UN 3257
Proper shipping name : Elevated temperature liquid, n.o.s.

Class : 9
Packing group : III
Labels : Class 9 - Miscellaneous Dangerous Goods
ERG Code : 128
Marine pollutant : no

Note: If this product is being transported as a solidified product or sample, it is Not Regulated under IATA.

SAFETY DATA SHEET

INDUSTRIAL ASPHALT OXIDIZING FLUX 1500, 2000

000003001355



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Revision Date 2016/09/21

Print Date 2016/09/21

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

DSL

On the inventory, or in compliance with the inventory

TSCA

All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

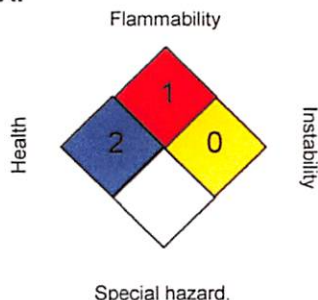
EINECS

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

For Copy of SDS

: Internet: www.petro-canada.ca/msds
Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228
For Product Safety Information: 1 905-804-4752

Prepared by

: Product Safety: +1 905-804-4752

Revision Date

: 2016/09/21

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.



SAFETY DATA SHEET

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product: Wood Fiberboard Products
(See Product List In Section 16)
Part Number: 3480000

Manufacturer: Blue Ridge™ Fiberboard Inc.
Address: 250 Celotex Way
Danville, Virginia 24541
Telephone: (434) 797-1321
Revision Date: 1/15/2015
In case of emergency, dial (800) 424-9300 (CHEMTREC)

Product Use: Building Material, Roofing Board, Wall Sheathing, Thermal and Sound Insulation

SECTION 2: HAZARDS IDENTIFICATION/EXPOSURE LIMITS

HMIS

Health	1
Flammability	1
Reactivity	0
Personal Protection	

Product is classified as non-hazardous per OSHA 1910.1200. Wood Fiberboard is defined by OSHA as an "article." A manufactured item that is formed to a specific shape or design during manufacture that does not release or result in exposure to a hazardous chemical under normal use conditions.

SECTION 3: HAZARDS COMPONENTS

Chemical Name:	CAS Number	% by Weight	SARA 313	Vapor Pressure (mm Hg@20°C)	LEL (@24°C)
1. Wood Fiber	N/A	85-95	No	N/A	N/A

Under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1966 (SARA) and 40 CFR Part 372, chemicals listed on the 313 List (40 CFR Part 373.65) are identified under the heading "SARA 313." N/A = Not Applicable

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Flush eyes with water to remove fibers.

SKIN CONTACT: Flush with water to remove fibers. Wash affected areas with soap and water if available.

INHALATION: Not expected to be an exposure route. If a dust exposure occurs, remove victim from exposure source and treat symptomatically.

INGESTION: Not expected to be an exposure source.

SECTION 5: FIRE AND EXPLOSIVES HAZARDS

FLASHPOINT: Not applicable. Product is a solid.

EXTINGUISHING MEDIA: Water fog, foam, dry chemical.

CHEMICAL/COMBUSTION HAZARDS: Stacked material will retain heat and has the potential to re-ignite.

PRECAUTIONS/PERSONAL PROTECTIVE EQUIPMENT: Avoid smoke inhalation. Use appropriate respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Not applicable. Product is a solid.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES: None recognized.

SAFE STORAGE: None

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name:	OSHA				ACGIH			
	PEL	PEL/CEILING	PEL/STEL	SKIN	TLV	TLV/CEILING	TLV/STEL	SKIN
1. Wood Fiber	5 mg/m ³ *	N/E	10 mg/m ³ *	No	5 mg/m ³ **	N/E	10 mg/m ³ **	N/E

ENGINEERING CONTROLS: None required under normal use conditions.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses, chemical-resistant gloves. Respiratory protection if dusts are created.

N/E: Not Established *: Wood dust, soft and hard woods **: Wood dust, soft woods

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A	VAPOR DENSITY: N/A	% VOLATILE BY VOLUME: N/A
EVAPORATION RATE: N/A	pH LEVEL: N/A	% VOLATILE BY WEIGHT: N/A
WEIGHT PER GALLON: N/A	PRODUCT APPEARANCE: Brown Board	VOC CONTENT: N/A

SECTION 10: STABILITY/REACTIVITY

STABILITY: Stable. **HAZARDOUS POLYMERIZATION:** Will not occur.

CONDITIONS AND MATERIALS TO AVOID: None recognized.

HAZARDOUS DECOMPOSITION PRODUCTS: None recognized.

SAFETY DATA SHEET

Date of Preparation: 1/15/15	Page 2 of 2	3480000
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SECTION 11: TOXICOLOGICAL INFORMATION

Section 11 continued

SIGNS AND SYMPTOMS: Symptoms of eye irritation include tearing, reddening, and swelling. Symptoms of skin irritation include redness and swelling. Gastrointestinal irritation symptoms include nausea, vomiting, and abdominal discomfort.

AGGRAVATED MEDICAL CONDITIONS: None recognized.

OTHER HEALTH EFFECTS: Wood dust is listed by the IARC as a human carcinogen (Group 1).

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: N/E

DEGRADABILITY: N/E

BIOACCUMULATIVE POTENTIAL: N/E

SOIL MOBILITY: N/E

OTHER ADVERSE EFFECTS: None Recognized

SECTION 13: WASTE DISPOSAL INFORMATION

WASTE DISPOSAL INFORMATION: Product is classified as a non-hazardous waste.

SECTION 14: TRANSPORTATION INFORMATION

HAZARDOUS/NON-HAZARDOUS MATERIAL: Not regulated by DOT.

UN NUMBER: None

HAZARD CLASS: N/A

PACKING GROUP: N/A

UN PROPER SHIPPING NAME: N/A

ENVIRONMENTAL HAZARDS: None recognized.

BULK TRANSPORTATION INFORMATION: None.

SPECIAL PRECAUTIONS: None.

SECTION 15: REGULATORY INFORMATION

OTHER REGULATORY CONSIDERATIONS: None recognized.

SECTION 16: OTHER INFORMATION

Product List of Blue Ridge Fiberboard

Structodek® High Density (HD) Fiberboard Roof Insulation, Primed Red, Coated Two Sides (C2S)

Structodek® High Density (HD) Fiberboard Roof Insulation, Black Coated One Side (C1S) or Black Coated Six Sides (C6S)

Structodek® High Density (HD) Fiberboard Roof Insulation, Uncoated ("Natural")

Cant Strip

Tapered Edge

Solid Lam

SoundStop® SoundDeadening Board

Premium Sheathing, Black Coated One Side (C1S) or Black Coated Six Sides (C6S)

Industrial Board Plain (IBP)

VersaKor®

White Faced Building Board (WFBB)

PREPARATION DATE: 1/15/2015

PREPARED BY: Dave Carey

The information contained herein is based on the data available to us and is believed to be correct. However, we make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injury from the use of this product described herein.

SAFETY DATA SHEET

Section 1. Identification

Product Identifier: Butex 6512
Identified Uses: Asphalt modification
Supplier/Manufacturer: Performance Technology Services, LLC
Product Safety and Regulatory Affairs
PO Box 291
Cedar Brook, NJ 08018

In case of emergency: Information Phone: (856) 753-9811
Chemtrec: (800) 424-9300
International: (856) 753-9811

Section 2. Hazards Identification

HAZCOM Standard Status: This product is not considered hazardous by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Classification of the
Substance or mixture:

Skin Corrosion/Irritation	2
Eye Damage/Irritation	2A
Aquatic Acute	2
Aquatic Chronic	3

Hazards statement:

- H319 Causes serious eye irritation
- H315 Causes skin irritation
- H401 Toxic to aquatic life
- H412 Harmful to aquatic life with long lasting effects

Physical state: Liquid
Color: Milky white

Precautionary statements

Prevention:

- P280 Wear protective gloves and eye/face protection
- P273 Avoid release to the environment
- P264 Wash with plenty of water and soap after handling

Response:

- P305 If in eyes rinse thoroughly with water, remove contact lenses if present and repeat.
- P338
- P303 If on skin or hair: wash with soap and water
- P352
- P332 If skin irritation occurs: get medical advice and attention
- P313

P337 If eye irritation persists: call poison control center or see a
P311 physician immediately.
P362 Take off contaminated clothing and wash prior to reuse
P364

Storage: Prevent from freezing

Disposal: Dispose of content/container at appropriate collection facility
according to local, state and federal regulations.

label elements:

Signal Word: Warning



Section 3. Composition/information on ingredients

Chemical nature: Aqueous dispersion of a polymer based on styrene and 1,2 butadiene.

Substance/Mixture: Mixture

The following potentially hazardous ingredients are used to formulate the product. As supplied, the ingredients are bound in a polymer matrix. Because they are bound in the matrix, they are not expected to create any unusual hazards when handled and processed according to good manufacturing and industrial hygiene practices and the guidelines provided by this SDS.

<u>Ingredient Name</u>	<u>CAS#</u>	<u>% of Composition</u>
Oleic Acid, Potassium Salt	143-18-0	3 – 5
Proprietary Surfactant	N/A	1 – 3
Hydrochloric Acid	7647-01-0	0 – 2
Ethanol	64-17-5	1 – 3
Sulfur	7704-34-9	0 – 5

Section 4. First Aid Measures

Description of first aid measures

Eye contact: Immediately flush eyes with copious amounts of water; remove contact lenses if necessary and repeat flushing. Obtain medical attention if symptoms persist.

Inhalation: Remove the affected individual to fresh air and assist in breathing if necessary getting immediate medical attention if required.

Skin contact: Flush contaminated area with copious amounts of water then remove contaminated clothing and repeat. Get medical attention if any symptoms persist.

Ingestion

Rinse mouth immediately, seek medical attention. Do not induce vomiting.

Potential acute health effects

None known

Over exposure signs/symptoms

Skin contact: reddening, itching, swelling, burning and possible permanent damage.

Potential chronic health effects

No known significant effects or critical hazards.

Notes to physician: Treat symptomatically. No specific treatment.

Protection of first aiders: No special measures required.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: water spray, foam or dry chemical

Specific hazards arising

from the chemical: Toxic and irritation gases/fumes may be given off during burning or thermal decomposition.

Hazardous thermal

decomposition products: Carbon dioxide, carbon monoxide, metal oxides

Special protective actions

for fire fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective

equipment for fire fighters: Self-contained breathing apparatus.

Section 6. Accidental release measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training.

Spill and leak procedures: Prevent entry into the sewage system, risk of blockage due to polymer deposits. Take up spilt latex with absorbent material or precipitate latex residue with sodium chloride and remove polymer coagulate.

Section 7. Handling and storage

Handling: Wear appropriate personal protection clothing and equipment. Refrain from unnecessary activities where material is being stored or processed. Wear approved respirator when ventilation is

inadequate. Keep in original container or in an approved alternative.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area away from incompatible materials and food and drink. Keep containers tightly closed at all times until ready for use. Do not store in improperly labeled containers.

Section 8. Exposure controls/personal protection

Occupational exposure limits

Ethanol	OSHA PEL	PEL 1,000 ppm; 1,900 mg/m ³ ; TWA 1,000 ppm 1,900 mg/m ³
	ACGIH TLV	STEL value 1,000 ppm

Appropriate engineering controls: Thermal processing operations should be ventilated to control gases and fumes given off during processing. Eye wash stations and safety showers should be available in the immediate vicinity of the use of this material.

Personal protection

Hygiene measures: Wash exposed skin thoroughly with soap and water immediately after exposure. Wash contaminated clothing prior to reusing.

Respiratory protection: Any respirator used must be selected according to expected exposure levels and available ventilation in the immediate area.

Skin protection: Wear long pants, long sleeve shirts and chemical resistant gloves along with suitably protective footwear.

Eye protection: Always wear protective eye goggles when handling chemicals.

Section 9. Physical and Chemical Properties

Physical state:	Liquid
Color:	White
Odor:	Odorless
pH:	5 +/- .5
Boiling point:	100 °C
Sp. Gravity:	0.92
Dynamic viscosity:	1500 +/- 500 mPa•S
Solids content:	65 +/- 1 percent

Section 10. Stability and reactivity

Reactivity: Unreactive under normal conditions of storage and use.

Chemical stability: Stable.

Conditions to avoid: Heat and direct sunlight.

Incompatible materials: No specific data.

Hazardous decomposition
products:

Hydrogen chloride via thermal decomposition.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Oleic Acid, Potassium Salt	LD50 oral	Rat	>5000 mg/kg	
	LD50 dermal	Rat	>2000 mg/kg	
Sulfur	LD50	Rat-oral	>8437 mg/kg	
	LD50	Rat-dermal;	>2000 mg/kg	
	LC50	Rat-inhalation	>5.43 mg/L	4 hours
Proprietary surfactant	LD50	Rat-oral	945 mg/kg	

Irritation/Corrosion

Product/ingredient name	Target organ	Result	Species	Exposure
Oleic Acid, Potassium Salt	Eyes	Moderate irritant	Rabbit	
	Skin	Moderate irritant	Rabbit	4 hours
Sulfur	Eyes	Moderate irritant		
	Skin	Mild irritant		
	Ingestion	Mild irritant		
Proprietary surfactant	Skin	Moderate irritant		
	Eyes	Severe irritant		

Carcinogenicity

Product/ingredient name	CAS #	ACGIH	IARC	NTP	OSHA
Oleic Acid, Potassium Salt	143-18-0	Not Classified (N/C)	N/C	N/C	N/C
Sulfur	7704-34-9	N/C	N/C	N/C	N/C
Proprietary surfactant	N/A	N/C	N/C	N/C	N/C

Genetic toxicity

Product/ingredient name	CAS #	ACGIH	IARC	NTP	OSHA
Oleic Acid, Potassium Salt	143-18-0	N/C	N/C	N/C	N/C
Sulfur	7704-34-9	N/C	N/C	N/C	N/C
Proprietary surfactant	N/A	N/C	N/C	N/C	N/C

Reproductive toxicity

Product/ingredient name	CAS #	ACGIH	IARC	NTP	OSHA
Oleic Acid, Potassium Salt	143-18-0	N/C	N/C	N/C	N/C
Sulfur	7704-34-9	N/C	N/C	N/C	N/C
Proprietary surfactant	N/A	N/C	N/C	N/C	N/C

Teratogenicity

Product/ingredient name	CAS #	ACGIH	IARC	NTP	OSHA
Oleic Acid, Potassium Salt	143-18-0	N/C	N/C	N/C	N/C
Sulfur	7704-34-9	N/C	N/C	N/C	N/C
Proprietary surfactant	N/A	N/C	N/C	N/C	N/C

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Oleic Acid, Potassium Salt	Acute EC50	Daphnia	.57 ppm	48 hours
	Acute LC50	Rainbow, Donaldson trout	9.19 ppm	96 hours
		Oncorhynchus Mykiss		
Proprietary surfactant	Acute LC50	Rainbow trout	0.7 mg/l	96 hours

Sulfur

There is minimal immediate ecological risk from spills of this product. However, over long-term exposure under aerobic conditions, sulphur can oxidize, yielding acidic runoff (water) or acidic conditions in soils; the oxidized form, due to its acid nature, has the potential to adversely affect aquatic and terrestrial organisms. In addition, under anaerobic conditions, elemental sulphur can be biochemically reduced to forms such as sulfide ion or hydrogen sulfide, which have the potential to pose ecological risks.

Section 13. Disposal considerations

Waste disposal:	Waste disposal should be in accordance with existing environmental controls as set forth by local, state and federal bodies. The generation of waste should be avoided or minimized wherever and whenever possible. Empty containers that contain some product residue should be disposed of in a safe and environmentally competent way.
Empty Containers:	Recondition or disposal of empty containers in accordance with governmental regulations. Do not reuse container. Observe label precautions.

Section 14. Transport Information

<u>Regulatory Information</u>	<u>UN Number</u>	<u>Proper shipping name</u>	<u>Classes</u>	<u>PG</u>	<u>Label</u>	<u>Additional Information</u>
DOT Classification	-	-	-	-	-	Not regulated
IMDG Class	-	-	-	-	-	Not regulated
IATA-DGR Class	-	-	-	-	-	Not regulated

PG – Packing Group

Section 15. Regulatory Information

SARA 311/312 Acute

SARA Title III Section 313 None
Extremely Hazardous
Substances

SARA Title III Section 313
Toxic Chemicals None

US EPA CERCLA None
Hazardous Substances
(40 CFR 302)

State regulations

The following chemicals are listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State code</u>	<u>Concentration %</u>
Styrene-Butadiene Copolymer	9003-55-8		60 – 66
Water	7732-18-5		29 – 34
Oleic Acid, Potassium Salt	143-18-0		3 – 5
Proprietary Surfactant	N/A		3 – 6
Sulfur	7704-34-9		1 – 3

Massachusetts Substances:	MA – S
Massachusetts Extraordinary Hazardous Substances:	MA – Extra HS
New Jersey Hazardous Substances:	NJ – HS, Ethanol
Pennsylvania RTK Hazardous Substances:	PA – RTK HS, Ethanol, Oleic acid
Pennsylvania Special Hazardous Substances:	PA – Special HS, Ethanol, Oleic acid

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

U.S. Toxic Substances Control Act: Listed on the TSCA Inventory

Section 16. Other information

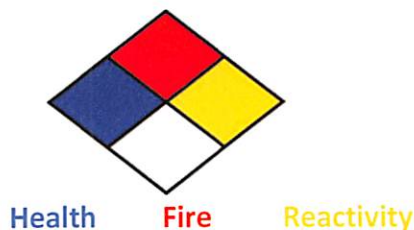
Hazardous Material Information System:

Health	2
Flammability	1
Physical Hazard	0

0=Insignificant 1=Slight 2=Moderate 3=High

The Customer is responsible for determining the PPE code for this material. HMIS ratings are to be used with a fully implemented HMIS program. HMIS is a registered mark of the National Paint & Coatings Association (NPCA). HMIS materials may be purchased exclusively from J.J. Keller (800) 327-6868.

National Fire Protection Association (USA):



0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Performance Technology Services method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by ARLANXEO as a customer service.

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