

SAFETY DATA SHEET**Alon Asphalt Company - Slow Curing Cutback Asphalt**

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Alon Asphalt Company - Slow Curing Cutback Asphalt**
PRODUCT CODES: All cutbacks with SC and CMB designations
SUPPLIER/MANUFACTURER'S NAME: **Alon Asphalt Company**
ADDRESS: 14700 Downey Ave., Paramount, CA 90723 USA
EMERGENCY PHONE: **TOLL-FREE in USA/Canada** 800-424-9300 Chemtrec
BUSINESS PHONE: 562-748-4711 (Product Information)
WEB SITE: www.alonasphaltcompany.com
DATE OF PREPARATION: September 28, 2014
DATE OF LAST REVISION: November 20, 2016

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a black viscous liquid with a mild diesel odor.
HEALTH HAZARDS: Exposure to this product can be irritating to the eyes, respiratory system and skin. Heated materials can cause thermal burns. Heated materials may liberate hydrogen sulfide. Long-term exposure to high concentrations of asphalt vapors may cause chronic bronchitis and pneumonitis.
FLAMMABILITY: This product is a non-flammable material with a flash point of 270° - 340°F.
ENVIRONMENTAL EFFECTS: The Environmental effects of this product have not been investigated. This material is not expected to be toxic to aquatic organisms.

US DOT SYMBOLS



CANADA (WHMIS) SYMBOLS

Complies with WHMIS 2015

EUROPEAN and (GHS) Hazard Symbols

Signal Word: **Danger!****CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1910.1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:**

This product does meet the definition of a hazardous substance or preparation as defined by OSHA in 29 CFR 1910.1200 or the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

Classification of the substance or mixture according to Regulation (EC) No1272/2008 Annex VI

EC# 232-490-9 This substance is not classified in the Annex VI of Directive 67/548/EEC

EC# 270-676-1 Index# 649-227-00-2

Crumb Rubber (Recycled Tire Rubber) is not listed in ESIS

EC# 231-977-3 Index# 016-001-00-4

Component(s) contributing to Hazard:

All components

GHS Hazard Classification(s):

Carcinogenicity Category 2

Acute Toxicity Inhalation Category 2

Hazard Statement(s):

H351: Suspected of causing cancer

H315: Causes skin irritation

H319: Causes serious eye irritation

H330: Fatal if inhaled

H335: May cause respiratory irritation

Precautionary Statement(s):

P260: Do not breath dust/fume/gas/mist/vapors /spray

P264: Wash hands thoroughly after handling

P271: Use only in well ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

EYE: Contact may cause mild irritation including stinging, watering and redness. Contact with heated material may cause thermal burns. Vapors or fumes may cause watering of the eyes.

SKIN: Contact may cause mild to moderate skin irritation. Prolonged or repeated contact may worsen irritation by causing drying and cracking of the skin leading to dermatitis (inflammation). Long-term skin exposure can increase sensitivity to the sun and cause discoloration. Contact with the heated material may cause thermal burns. Fumes from heated material can also cause irritation. No harmful effects from skin absorption are expected.

INHALATION: Breathing vapors or fumes from the hot material may cause headaches, dizziness and lung irritation. Heated material may liberate hydrogen sulfide. This material contains sulfur compounds which may form hydrogen sulfide. Hydrogen sulfide has a strong rotten-egg odor. However, with continued exposure and at high levels, H₂S may deaden a person's sense of smell. If the rotten egg odor is no longer noticeable, it may not necessarily mean that exposure has stopped. At low levels, hydrogen sulfide causes irritation of the eyes, nose and throat. Moderate levels can cause headache, dizziness, nausea and vomiting, as well as coughing and difficulty breathing. Higher levels can cause shock, convulsions, coma and death. After serious exposure, symptoms usually begin immediately.

INGESTION: Ingestion may cause irritation of the digestive tract, nausea, vomiting and diarrhea.

CHRONIC: Breathing vapors or fumes from the hot material may cause headaches, dizziness and lung irritation. Long-term exposure to high concentrations of asphalt fumes may cause chronic bronchitis and pneumonitis (inflammation of the lungs).

TARGET ORGANS: ACUTE: Eye, Respiratory System, Skin CHRONIC: Respiratory System

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	GHS HAZARD CLASSIFICATION(S);
Asphalt	8052-42-4	232-490-9	0612	50 - 90%	Not Classified
Diesel	68476-34-6	270-676-1	1561	10 – 50%	H351 Carc. Cat 2, H315 Skin Irritant Cat 2, H304 Asp Tox Cat 1, H226 Flam Liq Cat 3, H319 Eye Irritant Cat 2, STOT RE Cat 2
Crumb Rubber (Recycled Tire Rubber)	Not Listed	Not Listed	Not Listed	0 – 10%	Not Classified
Hydrogen Sulfide	7783-06-4	231-977-3	0165	<0.1%	H330: Acute Inhalation Toxicity Cat 2
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: Crumb rubber may contain various amounts of the following: Naphthenic/Aromatic Extender Oil 64742-02-7, Carbon Black 1333-86-4, Talc 64742-02-7, Zinc oxide 1314-13-2, or Sulphur 7704-34-9. Because this is derived from recycled tires and varied sources the actual percentages will vary.

This product has been classified in accordance with the hazard criteria of the 29CFR1910.1200 and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

SECTION 4 - FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label, bill of lading and/or MSDS to health professional with contaminated individual.

EYE CONTACT: If irritation or redness develops from exposure to fumes, move victim away from exposure and into fresh air. Flush eyes with clean water. If irritation or redness persists, seek medical attention. For contact with the molten material, gently open eyelids and flush affected eye(s) with cold, not icy, water. Seek immediate medical attention.

SKIN CONTACT: For contact with hot asphalt, flush or immerse affected area(s) using cold, not icy water for up to 10 minutes. Keep injury cool to minimize swelling and tissue damage. DO NOT remove asphalt which has adhered to skin. Contaminated clothing may be removed provided it is not adhering to the skin. Seek immediate medical attention.

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

INHALATION: If respiratory symptoms develop from exposure to fumes, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION: Ingestion of this material is not a likely route of entry however, if this product is swallowed, seek immediate medical attention.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, or eye problems may be aggravated by prolonged contact.

RECOMMENDATIONS TO PHYSICIANS: Once it has cooled, adhered asphalt is not harmful to the skin and in fact provides a sterile cover over the affected area. The asphalt will detach itself, usually after a few days as healing occurs. If it is necessary to remove the asphalt, only medically approved solvents or warm paraffin should be used.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: 270° - 340°F
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): NA Upper (UEL): NA
OSHA FLAMMABILITY CLASS: Non-regulated
FIRE EXTINGUISHING MATERIALS: Dry chemical, carbon dioxide, water spray or foam is recommended.
UNUSUAL FIRE AND EXPLOSION HAZARDS: This material may burn, but will not ignite readily. Flammable and toxic hydrogen sulfide may form in closed tank headspaces. Flammability of headspace vapors containing hydrogen sulfide will differ appreciably from the values given for asphalt.

Explosion Sensitivity to Mechanical Impact:

Not Sensitive.

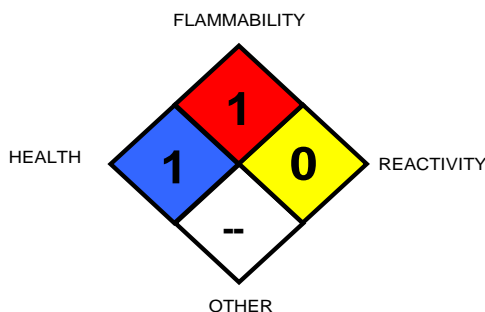
Explosion Sensitivity to Static Discharge:

Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Notify persons of spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Contain spill for recovery or disposal using appropriate recovery methods. Notify fire authorities and appropriate federal, state, and local agencies. Cleanup under expert supervision is advised. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802). Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Normally stored, transported and used at temperatures between 70° - 190°F. Temperatures outside of this range may cause product degradation.

Do not use or store near heat, sparks, or open flames. Use or store only in a well-ventilated area. Keep container closed when material is not in use.

Toxic quantities of hydrogen sulfide (H₂S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H₂S is present. See Exposure Controls/Personal Protection, Section 8.

SPECIAL NOTE: Do not enter confined spaces such as tanks or pits without following proper entry procedures.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA	NIOSH
Asphalt	8052-42-4	0.5 mg/m ³ TWA	Not Listed	0.5 mg/m ³
Diesel	68476-34-6	Not Listed	Not Listed	Not Listed
Crumb Rubber (Recycled Tire Rubber)	Not Listed	Not Listed	Not Listed	Not Listed
Hydrogen Sulfide	7783-06-4	1 ppm TWA	20 ppm Ceiling	10 ppm

Note: The ACGIH TLV is 0.5 mg/m³ as the benzene extractable portion of the inhalable fraction of asphalt fume. The TLV may also be determined by unspecified "equivalent" methods.

Currently, International exposure limits are not established for all of the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:

Viscous Liquid

APPEARANCE & ODOR:

Black viscous liquid with a mild diesel odor

ODOR THRESHOLD (PPM):

Mild

VAPOR PRESSURE (mmHg):

<1

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

VAPOR DENSITY (AIR=1):	>1
EVAPORATION RATE (nBuAc = 1):	Not Available.
BOILING POINT (C°):	Not Available
MELTING POINT (C°):	Not Applicable
pH:	Not Applicable
SPECIFIC GRAVITY 20°C: (WATER =1)	0.8 – 1.0
SOLUBILITY IN WATER (%)	Insoluble
VISCOSITY:	Variable
SOFTENING POINT:	Not Applicable

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: Heating this material may produce hydrogen sulfide.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, or nitric acid.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with incompatible materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is not available for mixture:

CAS# 8052-42-4

Acute Oral Toxicity LD50	5,001 mg/kg	Rat
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Acute Dermal Toxicity LD50	2,001 mg/kg	Rat
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SUSPECTED CANCER AGENT: This product may contain an ingredient(s) that is found on one or more of the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is considered to be, or suspected to be a cancer-causing agent by these agencies.

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes and respiratory system.

SENSITIZATION OF PRODUCT: This product is not considered a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

CARCINOGENICITY NOTE: Skin application of asphalt fume condensate fractions caused skin tumors in laboratory mice. Animal studies in which high concentrations of asphalt fumes were breathed for extended periods of time did not cause carcinogenic effects.

There is no evidence presented by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA) to establish Asphalt as a carcinogen (cancer causing compound). After a review of the research, the International Agency for Research on Cancer (IARC) concluded there is inadequate evidence that bitumes (asphalt) alone are carcinogenic in humans; that there is limited evidence to suggest that asphalt alone is carcinogenic to humans.

Occupational Exposure: Data released by the National Institute of Occupational Safety and Health (NIOSH) suggests paving and roofing asphalt fumes and asphalt paint fumes are a potential carcinogen to individuals who have long term exposure to high concentrations of fumes, as might be expected from workers in the paving and roofing industries. The data is based on animal and human studies and have not been validated as conclusive by other studies or research organizations.

Exposure to the Community or to responders, if any, is infrequent, and at concentrations and durations significantly below levels of exposure that might be experienced by paving and roofing workers. Asphalt odors occur at levels significantly below levels needed to produce harmful health effects.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: This material is not expected to have a significant adverse effect on the environment

EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on this product's effects on aquatic life. Latex, a possible ingredient, is harmful to aquatic life.

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use resulting in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulation regarding the proper disposal of this material.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Hot Asphalt, cutback

HAZARD CLASS NUMBER and DESCRIPTION: Class 3 Combustible liquid

UN IDENTIFICATION NUMBER: UN1999

PACKING GROUP: PGIII

DOT LABEL(S) REQUIRED: Combustible Liquid

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2012): 130

MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.

Note: This material can be shipped within the USA at ambient temperatures via road or rail as Non-Hazardous material in quantities less than 119 Gallons.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:

THIS PRODUCT IS SUBJECT TO TIER II REPORTING REQUIREMENTS.

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes Chronic Health: Yes Fire: No Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product contains an ingredient(s) which is on the California Proposition 65 lists.

WARNING THIS PRODUCT CONTAINS AN INGREDIENT THAT IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OF REPRODUCTIVE HARM.

SAFETY DATA SHEET

Alon Asphalt Company - Slow Curing Cutback Asphalt

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed
Australian Inventory of Chemical Substances (AICS):	Listed
Korean Existing Chemicals List (ECL):	Listed
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Listed
Swiss Giftliste List of Toxic Substances:	Listed
U.S. TSCA:	Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett

GHS MSDS Compliance PLUS

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End of SDS Sheet