

FLUX

SECTION 1 – SUBSTANCE IDENTITY AND COMPANY CONTACT INFORMATION

PRODUCT NAME	Flux
TRADE NAME	Asphalt
SYNONYMS	85/100, PG 58-22, PG 58-28, 150/200, PG 64-28
PRODUCT NUMBER	Not applicable.
CHEMICAL FAMILY	Petroleum Hydrocarbon
PRODUCT USE	Roofing products
MANUFACTURER/SUPPLIER	IKO Industries Ltd. 71 Orenda Rd Brampton, Ontario L6W 1V8
WEBSITE	www.iko.com
EMERGENCY NUMBER	CANUTEC: 1-613-996-6666 (24 hours information only)

SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

SIGNAL WORD DANGER

SYMBOL(S)

CLASSIFICATION Carcinogenicity – Category 2
Acute Inhalation Toxicity – Category 4HAZARD STATEMENTS H304 May be fatal if swallowed and enters airways
H313 May be harmful in contact with skin
H315 Causes skin irritation
H320 Causes eye irritation
H333 May be harmful if inhaled
H351 Suspected of causing cancer
H413 May cause long lasting harmful effects to aquatic life.PRECAUTIONARY STATEMENTS P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves, protective clothing, and eye protection.
P308+P313 If exposed or concerned: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local,



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regional, national, provincial, territorial, and international regulations.

NFPA

Health: 2
Flammability: 1
Instability: 0

HMIS

Health: 1
Flammability: 1
Physical Hazards: 0

SECTION 3 – CHEMICAL COMPOSITION AND DATA ON COMPONENTS

HAZARDOUS CHEMICAL NAME	% (w/w)	CAS NUMBER
Asphalt (Bitumen)	≥ 97	8052-42-4

Note: During transport, storage or use of heated product, small amounts of toxic hydrogen sulfide H₂S (CAS 7783-06-4) may be generated.

SECTION 4 – FIRST AID

INHALATION

Evacuate to fresh air. Apply Cardio Pulmonary Resuscitation if not breathing. If symptoms persist, get medical attention immediately.

INGESTION

If ingested, DO NOT INDUCE VOMITING and do not let stomach content get into the lungs. Get medical attention immediately.

SKIN CONTACT

For hot asphalt contact, cool body part by water immersion or shower. DO NOT attempt removal of asphalt, but split longitudinally if splash is circumferential to avoid tourniquet effect. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of the eyes. Get medical attention if needed.

EYE CONTACT

Flush affected eye in a stream of water for at least 15 minutes. Get medical attention if eye(s) is inflamed.

ACUTE AND CHRONIC SYMPTOMS

Refer to section 11, Toxicological Information, for additional information.

MEDICAL ATTENTION

Notes to Physician: No attempt should be made to remove firmly adhering bitumen from the skin. Once bitumen is cool, it does no further harm and provides a sterile covering over burnt area. Bitumen plaque will detach itself as healing progresses. If solvent treatment is used, it should be followed by washing with soap and water, then application of re-fattening agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents may cause further skin damage.



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SECTION 5 – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	Dry chemical, carbon dioxide.
FIRE FIGHTING	Cool tanks exposed to fire with water. Excessive use of water may spread the fire and can cause violent eruption of hot asphalt. When heated above its flashpoint or if held in storage at high temperatures, this material can release vapors, which can burn in the open or be explosive in confined spaces if exposed to ignition.
FLAMMABILITY	Not flammable.
PROPERTIES:	
FLASH POINT	270°C (518°F) minimum by C.O.C.
FLAMMABLE LIMITS IN AIR	No information available.
AUTO IGNITION TEMPERATURE	370 - 480°C (698 - 867°F) (approx.)
SPECIAL PPE FOR FIRE-FIGHTERS	Use NIOSH approved self-contained breathing equipment when exposed to product flames or fire, as product will emit very toxic fumes on thermal degradation.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE MEASURES AND EMERGENCY PROCEDURES	Avoid contact with skin and eyes. Isolate area and keep unnecessary personnel away. Use personal protection described in section 8, Exposure Control and Personal Protection.
ENVIRONMENTAL PRECAUTIONS	Avoid runoff into storm sewers, ditches and waterways. Notify local health and pollution control agencies if appropriate.
SPELL MANAGEMENT	In case of spill or leakage, allow to harden or solidify with inert absorbent material such as sand or soil, and shovel into properly labeled containers. Evaluate residue to determine if it is a hazardous waste by characteristic. Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING PROCEDURE	Use in well ventilated areas; avoid breathing mist or vapours. For outdoor use, remain upwind of hot asphalt when possible. Avoid prolonged exposure. Avoid skin and eye contact. During storage or transit of hot asphalt, harmful concentration of hydrogen sulfide gas may accumulate in enclosed spaces. Open tank car hatches with caution. Avoid inhalation. All equipment used when handling the
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product must be grounded. Maintain same precautions when gauging and sampling. Use personal protective equipment described in section 8, Exposure Control and Personal Protection.

STORAGE PRECAUTIONS

Material is normally stored in closed tanks at 250 to 375°F. Store in a cool, dry, well-ventilated area away from sources of heat, spark, or open flame and incompatible materials. Protect material from direct sunlight. Assure proper ventilation of storage or shipping containers to prevent accumulation of hazardous concentrations of off-gassed hydrocarbon gas or hydrogen sulfide (H₂S). Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

CHEMICAL NAME	OCCUPATIONAL EXPOSURE LIMITS				
	ALBERTA	ONTARIO	BRITISH COLUMBIA	OSHA	ACGIH
Asphalt (Bitumen) Fumes	TWA : 5 mg/m ³	TWA : 0.5 mg/m ³	TWA : 0.5 mg/m ³	No information available.	TWA : 0.5 mg/m ³
Hydrogen Sulfide	TWA : 10 ppm Ceiling : 15 ppm	TWA : 10 ppm STEL : 15 ppm	Ceiling : 10 ppm	Ceiling : 20 ppm Peak : 50 ppm	TWA : 1 ppm STEL : 5 ppm

ENGINEERING MEASURES

For normal application, special ventilation is not necessary. If user's operations generate vapours or fumes, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work station.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION Not necessary unless exposure limits exceeded for asphalt fumes or hydrogen sulfide. If airborne limits are exceeded, use a NIOSH approved respiratory device.

SKIN AND BODY PROTECTION Minimize skin contact. Wear appropriate thermal resistant gloves and clothing when handling hot asphalt.

EYE PROTECTION Use splash proof chemicals goggles or face shields when handling hot material.

HYGIENE MEASURES Handle in accordance with good industrial hygiene and safety practices.

OTHER CONTROLS If contact is unavoidable, wear a face shield, long-sleeved shirt, cuff-less pants, loose clothing, and closed toe high top shoes.



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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE (PHYSICAL STATE, COLOR etc.)	Black plastic semi-solid when cold, viscous fluid when hot.
ODOR	Characteristic petroleum odor.
ODOR THRESHOLD	No information available.
PH	No information available.
MELTING POINT/FREEZING POINT	No information available.
INITIAL BOILING POINT AND BOILING RANGE	> 470°C (> 878°F)
FLASH POINT	270°C (518°F) minimum by C.O.C.
EVAPORATION RATE	Not applicable.
FLAMMABILITY	Not flammable.
UPPER/LOWER FLAMMABILITY/EXPLOSIVE LIMITS	No information available.
VAPOR PRESSURE	20 mm Hg @ 38°C (V.O.C. = negligible)
VAPOR DENSITY	No information available.
MOLECULAR WEIGHT	No information available.
SOLUBILITY(IES)	Insoluble in water.
PARTITION COEFFICIENT: N-OCTANOL/WATER	No information available.
AUTO-IGNITION TEMPERATURE	370 - 480°C (698 - 867°F) (approx.)
SPECIFIC GRAVITY	Approx. 0.9-1.0 (@ 15°C)
VISCOSITY	No information available.

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY:

CHEMICAL STABILITY Stable under normal conditions of use and storage.



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POSSIBILITY OF HAZARDOUS REACTIONS	No information available.
CONDITIONS TO AVOID	Excessive heat approaching flash point.
INCOMPATIBLE MATERIALS	Strong oxidizers, strong acids, and fluorine.
HAZARDOUS DECOMPOSITION PRODUCTS	CO _x , SO _x , NO _x , smoke on combustion, hydrogen sulfide.

SECTION 11 – TOXICOLOGICAL INFORMATION

ACUTE/CHRONIC TOXICITY	<p>WARNING: This product may contain Asphalt. IARC concludes that Asphalt is possibly carcinogenic to humans. IARC classification: Group 2B</p> <p>WARNING: This product may contain oxidized bitumens. The International Agency for Research on Cancer (the "IARC") published a monograph in 2013 which concluded that "occupational exposure to oxidized bitumens and their emissions during roofing operations are probably carcinogenic to humans". This warning may be updated at such time as a final determination is made and IARC has published its monograph on the matter. IARC classification: Group 2A</p> <p>The IARC found that there is "limited evidence" in humans for the carcinogenicity of occupational exposures to bitumens and bitumen emissions during roofing and mastic-asphalt work. The IARC also found that there is "sufficient evidence" in experimental animals for carcinogenicity of fume condensates generated from oxidized bitumen. All other evidence of cancer in humans and experimental animals was judged "inadequate" or "limited." The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.</p>
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	No information available.
PRIMARY ROUTE OF EXPOSURE	Skin and inhalation.
HEALTH EFFECTS:	
EYES	Contact with hot material may result in pain, tears, swelling, redness blurred vision and thermal burns. Vapours of hot asphalt may cause eye irritation.
SKIN	Contact with hot product may cause thermal burns. Vapors of hot asphalt may cause skin irritation. Cool material may cause minor skin irritation. Prolonged or repeated contact may cause dryness and skin irritation.



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INHALATION	Fumes from hot material can be unpleasant and may produce irritation of the upper respiratory tract, nausea, headaches, and dizziness. Prolonged exposure to hydrogen sulfide gas will diminish the sense of smell. Very high levels of hydrogen sulfide gas may lead to immediate loss of consciousness and even death.
INGESTION	May be harmful if ingested: may cause mouth, throat and gastrointestinal tract irritation. Aspiration of petroleum distillates into the lungs can cause severe chemical pneumonitis that can be fatal.
STOT (SPECIFIC TARGET ORGAN TOXICITY)- SINGLE EXPOSURE	No information available.
STOT (SPECIFIC TARGET ORGAN TOXICITY) – REPEATED EXPOSURE	Causes damage to organs through prolonged or repeated exposure.
CARCINOGENICITY	Asphalt is listed as IARC Group 2B (possibly carcinogenic to humans). Oxidized asphalt is listed as IARC Group 2A (probably carcinogenic to humans).
REPRODUCTIVE TOXICITY:	
DEVELOPMENT OF OFFSPRING	No information available.
SEXUAL FUNCTION AND FERTILITY	No information available.
GERM CELL MUTAGENICITY	No information available.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY	Asphalt may be harmful to aquatic life.
PERSISTENCE & DEGRADABILITY	Not expected to be biodegradable.
BIODEGRADATION MOBILITY	No information available.
BIOACCUMULATION POTENTIAL	No information available.



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SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL RECOMMENDATIONS In case of spill or leakage, allow to harden and shovel into properly labeled containers. Follow federal, provincial/state, and local laws and regulations.

SECTION 14 – TRANSPORT INFORMATION

LAND: US DOT	UN 3257, Elevated temperature liquid, N.O.S., Class 9, PG III
CANADA TDG	UN 3257, Elevated temperature liquid, N.O.S., Class 9, PG III

SECTION 15 - REGULATIONS

WHMIS CLASSIFICATION	This product has been classified as a controlled product in accordance with the hazard criteria of the CRP and the SDS contains all the information required by the CPR. D2B – Other toxic effects – TOXIC 
OSHA	This product is considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200)
EPA	No information available.
CEPA	No information available.

US FEDERAL REGULATIONS	ASPHALT (BITUMEN)
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D)	Listed
US EPCRA (SARA Title III) Section 313 – Toxic Chemical: De minimis concentration	Not listed
US EPCRA (SARA Title III) Section 313 – Toxic Chemical: Listed substances	Not listed
CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)	None

US STATE REGULATIONS

US STATE REGULATION	ASPHALT (BITUMEN)
US California Hazardous Substances (Director`s): Listed substance	Listed
US California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance	Listed
US- New Jersey RTK – Substances: Listed substance	Listed
US. Massachusetts RTK – Substance List	Listed
US. New Jersey Worker and Community Right to Know Act	Listed
US. Pennsylvania RTK – Hazardous Substances	Listed



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INVENTORY STATUS

COUNTRY(S) OR REGION	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
US & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product compliance with the inventory requirements administrated by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administrated by the governing country(s).

SECTION 16 – OTHER INFORMATION

REVISION DATE OF SDS	August 21, 2020
REPLACES THE MSDS/SDS FROM	January 23, 2018
PREPARED BY	HSE department
GENERAL INFORMATION	1-888-766-2468
WEBSITE	www.iko.com
OTHER INFO/DISCLAMERS	Read this Safety Data Sheet before handling or disposing of this product.

This product safety information is provided to help our customers with health, safety and/or environmental matters. We have taken reasonable effort to ensure that the test methods and sources for this data are correct and reliable, however, we give no warranty, expressed or implied, regarding its correctness. Since conditions or methods of handling and using this product are beyond our control, we do not assume responsibility and expressly disclaim liability for damages resulting from or connected with the handling, storage, use or disposal of the product.