

GHS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
		
		ADHESIVE Class 3 UN 1133 P.G.: III

SECTION I: IDENTIFICATION

Use: This product complements bituminous waterproofing membranes and is used as jointing mastics, caulking materials and joint fillers. It is compatible with bituminous materials and ensures good waterproofing.

Manufacturer:

Soprema Canada
1675 Haggerty Street
Drummondville (Quebec) J2C 5P7
CANADA
Tel.: 819 478-8163

Distributors:

Soprema Inc.
44955 Yale Road West
Chilliwack (BC) V2R 4H3
CANADA
Tel.: 604 793-7100

Soprema USA
310 Quadral Drive
Wadsworth (Ohio) 44281
UNITED STATES
Tel.: 1 800 356-3521

Soprema USA
12251 Seaway Road
Gulfport (Mississippi) 39507
UNITED STATES
Tel.: 228 701-1900

In case of emergency:

SOPREMA (8:00am to 5:00pm): 1 800 567-1492 CANUTEC (Canada) (24h.): 613-996-6666 CHEMTREC (USA) (24h.): 1 800 424-9300

SECTION II: HAZARD(S) IDENTIFICATION

DANGER

Flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful if swallowed. May cause respiratory irritation or drowsiness or dizziness. Causes skin irritation. Causes eye irritation. Suspected of damaging fertility or the unborn child. May cause damage to the central nervous system (CNS) through prolonged or repeated exposure if inhaled.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Do not eat or drink when using this product. Avoid breathing vapours. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves, eye protection and an organic vapour respirator. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Dispose of container in accordance with local, regional and national regulations.

SECTION III: COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
Aluminum	7429-90-5	10-30	1 mg/m ³	Not established
Asphalt	8052-42-4	10-30	0.5 mg/m ³	Not established
Xylene	1330-20-7	10-30	100 ppm	150 ppm
Mineral Spirits	64742-48-9	5-10	Not established	Not established
Oxidized Bitumen	64742-93-4	3-7	0.5 mg/m ³	Not established

Effects of Short-Term (Acute) Exposure

INHALATION

Inhalation of vapours of xylene can occur while using the product. The exposure to vapours of xylene over exposure limits may cause irritation of the respiratory system and CNS depression (headaches, dizziness, nausea, tiredness, confusion and coma).

Aluminum, Asphalt: Exposure is not expected by this route of entry under normal product use. (1)

Xylene: Xylene (mixed isomers) readily forms a vapour at room temperature. The main effect of inhaling xylene is depression of the CNS, with symptoms such as headache, dizziness, nausea and vomiting. Volunteers have tolerated 100 ppm, but higher concentrations become objectionable. Irritation of the nose and throat has occurred from exposure to approximately 200 ppm xylene (mixed isomers; unspecified composition) for 3-5 minutes or to 50 ppm m-xylene for 2 hours. Exposures estimated as 700 ppm (xylene composition not specified) have caused nausea and vomiting. An extremely high concentration (approximately 10 000 ppm, xylene composition not specified) has caused incoordination, loss of consciousness, respiratory failure and death. In some cases, a potentially fatal accumulation of fluid in the lungs (pulmonary oedema) may result. The symptoms of pulmonary oedema include coughing, chest pain and shortness of breath and can be delayed for up to 24 or 48 hours after exposure. These symptoms are aggravated by physical exertion. However, these effects are rarely seen since xylenes are

irritating and identifiable by odour at much lower concentrations. Xylene (mixed isomers) can accumulate in a confined space increasing the risk of toxicity. The only reported death resulted from exposure to approximately 10 000 ppm xylene (mixed isomers; unspecified composition) for several hours while painting in a confined space. The worker who died had severe lung congestion and pulmonary oedema. For two other workers who survived the exposure, both had reversible liver damage and one had reversible kidney damage. (1)

Mineral Spirits: No information available.

SKIN CONTACT

Frequent or prolonged contacts can remove the natural fat from the skin and may cause redness, skin irritation and dermatitis.

Aluminum: Aluminum is not irritating to the skin, based on animal information. No human information was located. In general, aluminum is probably very poorly absorbed through the skin. (1)

Xylene: Xylene (mixed isomers) liquid is a moderate skin irritant based on animal information. Studies with xylene isomers have shown irritation, redness and a burning sensation can result from contact. These effects are reversible shortly (usually within 1 hour) after the contact stops. Repeated or prolonged exposure to xylene can defat the skin resulting in dermatitis (red, dry, itchy skin). Xylene (mixed isomers) liquid or vapour can be absorbed through the skin, but not as readily as when inhaled or ingested. (1)

Asphalt, Mineral Spirits: May cause skin irritation. (2)

EYE CONTACT

The vapours may cause eye irritation with tearing and discomfort, redness and pain. Eye contact with the product may cause moderate irritation.

Aluminum: Aluminum is probably not irritating to the eye, except as a "foreign object". Some tearing, blinking and mild temporary pain may occur as the solid material is rinsed from the eye by tears. No irritation or inflammation was observed in cases where aluminum has become embedded in the eyes. Very mild irritation has been observed in an animal study. (1)

Xylene: Xylene (mixed isomers) liquid is a very mild irritant, based on animal information. (1)

Asphalt, Mineral Spirits: May cause eye irritation. (2)

INGESTION

It is unlikely that toxic amounts of this product would be ingested with normal handling and use. If significant amount of the product were ingested, symptoms as described for inhalation might occur. This product may cause irritation, mouth and throat burns and abdominal pains. The product can be aspirated (inhaled) into the lungs during ingestion or vomiting. Aspiration of even a small amount of liquid could result in a life threatening accumulation of fluid in the lungs. Severe lung damage (oedema), respiratory failure, cardiac arrest and death may result.

Aluminum: Short-term oral toxicity is expected to be slow. Aluminum is a normal component of the human diet and the normal daily intake is significant. (1)

Xylene: Xylene (mixed isomers) is not considered toxic if ingested based on animal toxicity information. Ingestion of large amounts is likely to cause CNS effects such as dizziness, nausea and vomiting. (1)

Asphalt, Mineral Spirits: No information available.

Effects of Long-Term (Chronic) Exposure

SKIN SENSITIZATION

Aluminum: Aluminum is not known to be a skin sensitizer. If aluminum is a true allergen, which is doubtful, the allergy is considered very rare. (1)

SKIN CONTACT

Xylene: Prolonged contact with xylene (mixed isomers) is expected to cause dermatitis (dry, red skin) because of its defatting action. Xylene (mixed isomers) is not known to be an occupational skin sensitizer. (1)

Asphalt, Mineral Spirits: Repeated or prolonged contact may cause irritation. (2)

INHALATION

Aluminum, Asphalt: Exposure is not expected by this route of entry under normal product use.

Xylene: See effects described below.

Mineral Spirits: No information available.

NERVOUS SYSTEM EFFECTS

Xylene: Long-term xylene (mixed isomers) exposure may cause harmful effects on the nervous system, but there is not enough information available to draw firm conclusions. Symptoms such as headaches, irritability, depression, insomnia, agitation, extreme tiredness, tremors, and impaired concentration and short-term memory have been reported following long-term occupational exposure to xylenes and other solvents. This condition is often referred to as "organic solvent syndrome". Unfortunately, there is very little information available that isolates xylenes from other solvent exposures in the examination of these long-term neurological effects. Other study deficiencies include inadequate reporting on the duration of exposure and the exposure levels, and poor matching of controls. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

BLOOD EFFECTS

Xylene: Historical reports sometimes associate xylene exposure with certain blood effects, including leukemia, which are now known to be caused by benzene. Xylene that does not contain benzene as a contaminant is not known to cause these effects. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

LIVER AND KIDNEY EFFECTS

Xylene: A number of case reports and occupational studies have suggested that liver and kidney damage may result from long-term occupational exposure to xylene. However, it is not possible to attribute these effects directly to xylene exposure because generally there was exposure to other chemicals at the same time, particularly other solvents, and there was no information provided on the exposure levels or duration of exposure. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

CARCINOGENICITY

Aluminum: Aluminum is not known to be a carcinogen. Cancers have not been observed in relevant animal studies. The International Agency for Research on Cancer (IARC) has not evaluated the carcinogenicity of this chemical. The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens. (1)

Xylene: IARC has determined that there is inadequate evidence for the carcinogenicity of xylene in humans. IARC has concluded that this chemical is not classifiable as to its carcinogenicity to humans (Group 3). ACGIH has designated this chemical as not classifiable as a human carcinogen (A4). NTP has not listed this chemical in its report on carcinogens. (1)

Oxidized asphalt: In its 2013 monograph (Volume 103), IARC conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was "occupational exposures to oxidized bitumens and their emissions during roofing" are classified in IARC Group 2A, "probably carcinogenic to humans.". However, due to the product form, exposure to such component is unlikely under normal conditions of use.

Asphalt, Mineral Spirits: No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

Aluminum: Aluminum is not known to cause developmental toxicity. (1)

Xylene: Xylene (mixed isomers) is considered fetotoxic in humans, based on observations of reduced foetal weight, delayed ossification and persistent behavioural effects in animal studies in the absence of maternal toxicity. Other developmental effects have been observed in animal studies in the presence of maternal toxicity. (1)

Asphalt, Mineral Spirits: No information available.

REPRODUCTIVE TOXICITY

Aluminum: Aluminum is not known to cause reproductive toxicity. (1)

Xylene: The limited information located suggests that xylene (mixed isomers) does not cause reproductive toxicity. Xylenes have been shown to transfer into human breast milk. (1)

Asphalt, Mineral Spirits: No information available.

MUTAGENICITY

Aluminum: Aluminum is not known to be mutagenic. (1)

Xylene: Xylene (mixed isomers) is not known to be a mutagen. Negative results have been obtained in a few limited studies in humans. Negative results have been obtained in studies in live animals and in cultured mammalian cells and bacteria, which were carried out with pure isomers of xylene and with mixed isomers containing up to 36% ethylbenzene. (1)

Asphalt, Mineral Spirits: No information available.

TOXICOLOGICALLY SYNERGISTIC MATERIALS

Xylene: There have been several studies in humans and animals on the interaction of xylenes with drugs, alcohol and other solvents. Xylene has a high potential to interact with other compounds because it increases metabolic enzymes in the liver and decreases metabolic enzymes in the lungs. In general, exposure to related solvents, such as benzene, toluene and ethanol (alcohol) slows the rate of clearance of xylenes from the body, thus enhancing its toxic effects. In rats, exposure to xylene (mixed isomers; unspecified composition) in combination with the solvents trichloroethylene or chlorobenzene has had an additive effect in causing hearing loss, while exposure to xylene (mixed isomers) enhanced the hearing loss caused by n-hexane and decreased the toxicity of n-hexane on peripheral nerves. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

POTENTIAL FOR ACCUMULATION

Xylene: The three xylene isomers are readily absorbed by inhalation and ingestion and are widely distributed throughout the body. A small amount may be absorbed through the skin. Xylenes are largely broken down by the liver and most of the absorbed material is rapidly excreted in the urine as breakdown products. Small amounts are eliminated unchanged in the exhaled air. There is low potential for accumulation. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

SECTION IV: FIRST-AID MEASURES

SKIN CONTACT

Wash with plenty of water. If skin irritation occurs: Get medical advice. Take off immediately all contaminated clothing and wash it before reuse.

EYE CONTACT

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

INHALATION

Remove person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.

SWALLOWING

Immediately call a poison center. Do NOT induce vomiting. Rinse mouth.

SECTION V: FIRE-FIGHTING MEASURES

FLAMMABILITY: Flammable 1C (NFPA)
EXPLOSION DATA: Sensitivity to mechanical impact: No
Sensitivity to static charge: Can accumulate static charge by flow.

FLASH POINT: 28°C (ASTM D-93)

AUTO-IGNITION TEMPERATURE: 527°C (xylene)

FLAMMABILITY LIMITS IN AIR: (% in volume) 1 – 7 (xylene)

FIRE AND EXPLOSION HAZARDS

This product and its vapours are easily ignited by heat, sparks or flames. Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel a considerable distance to a source of ignition and flash back to a leak or open container. The product may ignite on contact with strong oxidizing agents. Do not cut, puncture or weld empty containers.

COMBUSTION PRODUCTS

Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion. Toxic and/or irritating gases or fumes can emanate from empty containers when submitted to high temperatures: CO, CO₂, Aldehydes, ketone, acrolein, halogenated compound, aluminium oxide.

FIRE FIGHTING INSTRUCTIONS

Evacuate area. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standards. Approach fire from upwind and fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Always stay away from containers because

of the high risk of explosion. Stop leak before attempting to put out the fire. If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out. Move containers from fire area if this can be done without risk. Cool containers with flooding quantities of water until well after fire is out.

EXTINGUISHING MEDIA

Do not use water or halogenated extinguishing agents. Use dry chemical or CO₂, dry sand.

SECTION VI: ACCIDENTAL RELEASE MEASURES

RELEASE OR SPILL

Ventilate area. Wear appropriate protective equipment during cleanup. Eliminate all sources of ignition. Contain the spill. Sweep or shovel into containers with lids, use clean non-sparking tools to collect absorbed material. Cover and remove to appropriate well ventilated area until disposal. Do not touch or walk through spilled material. Wash spill area with soap and water. Prevent entry into waterways, sewers, basements or confined areas. Dispose of the product according to the environmental regulations.

SECTION VII: HANDLING AND STORAGE

HANDLING

This product is flammable and toxic. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing mist, vapour or dust. Wash thoroughly after handling. Before handling, it is very important that ventilation controls are operating and protective equipment requirements are being followed. People working with this product should be properly trained regarding its hazards and its safe use. Eliminate all ignition sources (e.g. sparks, open flames, hot surfaces). Keep away from heat. Ground transfer containers to avoid static accumulation. Tightly reseal all partially used containers. Do not cut, puncture or weld empty containers.

STORAGE

Store in a cool well-ventilated area out of direct sunlight and away from heat and ignition sources. Keep storage areas clear of combustible materials. No smoking near storage area. Store away from incompatible materials. Store the product according to occupational health and safety regulations and fire and building codes. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment near storage area. Inspect all containers to make sure they are properly labelled.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

HANDS: Wear gloves made from polyvinyl alcohol (PVA) or viton.

RESPIRATORY: If the TLV is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with standards.

EYES: Wear chemical safety goggles in accordance with standards.

OTHERS: Eye bath and safety shower.

CONTROL OF VAPOURS: Local exhaust is needed to control vapour and dust level to below recommended limits.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Paste
ODOUR AND APPEARANCE: Aluminum-colour paste with solvent odour
ODOUR THRESHOLD: Not available
VAPOUR DENSITY (air = 1): Heavier than air
EVAPORATION RATE (Butyl acetate = 1): 0.7 (xylene)
BOILING POINT (760 mm Hg): Not available
FREEZING POINT: Not available
SPECIFIC GRAVITY (H₂O = 1): 1.22 kg/L
SOLUBILITY IN WATER (20°C): Insoluble
VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT: 270 g/L
VISCOSITY: 300 1/10 mm (Cone penetrability)

SECTION X: STABILITY AND REACTIVITY

STABILITY: This material is stable.

CONDITIONS OF REACTIVITY: Avoid excessive heat.

INCOMPATIBILITY: Basis, acids and strong oxidizing agents, water, halogenated compounds, metal oxide.

HAZARDOUS DECOMPOSITION PRODUCTS: None identified.

HAZARDOUS POLYMERISATION: None.

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

Xylene: (1)

LC₅₀ (male rat): 6 350 ppm (4-hour exposure) (unspecified xylene isomers and ethylbenzene)

LD₅₀ (oral, rat): 3 523 mg/kg

Aluminum, Asphalt, Mineral Spirits: Not available.

Effects of Short-Term (Acute) Exposure

INHALATION

Xylene: The major effect of xylene inhalation is on the CNS. There is initial excitation followed by depression, drowsiness, incoordination and unconsciousness at approximately 2 000 ppm. Death at higher concentrations is from respiratory failure due to CNS depression and/or accumulation of fluid in the lungs (pulmonary oedema). (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

EYE IRRITATION

Aluminum: Aluminum is probably a non-irritant to very mild eye irritant. (1)

Xylene: Xylene (mixed isomers) is a very mild eye irritant. (1)

Asphalt, Mineral Spirits: No information available.

SKIN IRRITATION

Aluminum: Aluminum is not irritating to the skin. (1)

Xylene: Xylene (mixed isomers) is a moderate skin irritant. (1)

Asphalt, Mineral Spirits: No information available.

Effects of Short-Term (Acute) Exposure

INHALATION

Xylene: Rats exposed to 0, 50 or 100 ppm m-xylene for 3 months (6 hours/day, 5 days/week) had significantly increased sensitivity to pain at 50 ppm and impaired rotarod performance at 100 ppm. Reversibility was not assessed. Male rats exposed to 0, 100 or 1 000 ppm m-xylene for 12 weeks (6 hours/day, 5 days/week) had a dose-related impairment of learning when tested in a maze. The impairment was still present 2 months after exposure ended. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

CARCINOGENICITY

Aluminum: No carcinogenic effects attributable to aluminum metal powder have been observed in animal studies following exposures by various routes. (1)

Xylene: IARC has determined that there is inadequate evidence for carcinogenicity of xylene (mixed isomers) in animals. (1)

Asphalt, Mineral Spirits: No information available.

REPRODUCTIVE EFFECTS

Xylene: The limited information located suggests that xylene (mixed isomers) does not cause reproductive toxicity. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

Xylene: Xylene (mixed isomers) causes developmental toxicity (fetotoxic). Reduced foetal weight, delayed ossification and persistent behavioural effects have been observed in the absence of maternal toxicity. Other developmental effects have been observed in the presence of maternal toxicity. (1)

Aluminum, Asphalt, Mineral Spirits: No information available.

MUTAGENICITY

Aluminum: The information located is insufficient to conclude that aluminum is mutagenic. (1)

Xylene: Xylene (mixed isomers) is not known to be a mutagen. Negative results have been obtained in studies using live animals and in most studies with cultured mammalian cells and bacteria which were carried out with pure isomers of xylene and with mixed isomers containing up to 36% ethylbenzene. (1)

Asphalt, Mineral Spirits: No information available.

SECTION XII: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life.

SECTION XIII: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

This product is listed as hazardous waste. Consult local, state, provincial or territory authorities to know disposal methods. Also listed as hazardous waste by the RCRA (USA); waste disposal as to follow EPA regulations. Do not dispose of waste with normal garbage or sewers systems.

SECTION XIV: TRANSPORT INFORMATION

CLASSIFICATION (TDG - DOT): Class 3

IDENTIFICATION NUMBER: UN 1133

SHIPPING NAME: Adhesive

PACKING GROUP: III

CONTAINERS FOLLOW THE STANDARDS.

Classification based on Section V of this document

SECTION XV: REGULATORY INFORMATION

DSL: All constituents of this product are included on the Domestic Substances List (DSL - Canada).

TSCA: All constituents of this product are included on the Toxic Substances Control Act Inventory (TSCA - United States).

Prop. 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION XVI: OTHER INFORMATION

GLOSSARY

ASTM: American Society for Testing and Materials (United States)

CAS: Chemical Abstract Services

CSA: Canadian Standardization Association

DOT: Department of Transportation (United States)

EPA: Environmental Protection Agency (United States)

GHS: Globally Harmonized System

LD₅₀/LC₅₀: Less high lethal dose and lethal concentration published

NIOSH: National Institute for Occupational Safety and Health (United States)

RCRA: Resource Conservation and Recovery Act (United States)

TDG: Transportation of Dangerous Goods (Canada)

TLV-TWA: Threshold Limit Value – Time-Weighted Average

References:

- (1) CHEMINFO (2015) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada
- (2) Safety Data Sheet of the supplier

Code of SDS: CA U DRU SS FS 052
For more information: 1 800 567-1492

The Safety Data Sheets of SOPREMA Canada are available on Internet at the following site: www.soprema.ca

Justification of the update:

- GHS format.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.