



SAFETY DATA SHEET

ALUMINUM ROOF COATING

Offerte en français

HEALTH CANADA	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
 	 	 <p>PAINT Class 3 UN1263 P.G.: III</p>

SECTION I: IDENTIFICATION

Use: Waterproofing coating used on metal as a bituminous corrosive inhibitor and as a restoring agent over aged surfaces.

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

Distributor: Resisto Division, Soprema Canada
1675 Haggerty Street
Drummondville (Quebec) J2C 5P7
CANADA
Tel.: 819 478-8408 – 1 877 478-8408

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 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
Asphalt	8052-42-4	30-60	0.5 mg/m ³	Not established
Xylene	1330-20-7	10-30	100 ppm	150 ppm
Aluminium	7429-90-5	10-30	1 mg/m ³ (respirable)	Not established
Stoddard Solvent	8052-41-3	7-13	100 ppm	Not established

Effects of Short-Term (Acute) Exposure**INHALATION**

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

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 to 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)

Aluminium: There are no reports of effects following short-term inhalation of aluminium. (1)

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

Stoddard Solvent: Vapours or mist can cause irritation and CNS effects, such as headache, dizziness, intellectual impairment and fatigue. (1)

SKIN CONTACT

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

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)

Aluminium: It has generally been considered that aluminium is very poorly absorbed through the skin. Animal toxicity values for aluminium salts indicate that toxic effects would not be expected following short-term skin contact. (1)

Asphalt: May cause skin irritation. (2)

Stoddard Solvent: Stoddard solvent is a moderate skin irritant, based on animal information. Repeated or prolonged exposure may result in contact dermatitis. (1)

EYE CONTACT

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

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

Aluminium: No irritation or inflammation has been observed in cases where aluminium has become embedded in the eyes. (1)

Asphalt: May cause eye irritation. (2)

Stoddard Solvent: The vapour, mist and liquid can cause mild eye irritation. (1)

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. (1)

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

Aluminium: Short-term oral toxicity is low. Aluminium is a normal component of the human diet and the normal daily intake is significant. (1)

Stoddard Solvent: Animal studies indicate the oral toxicity of Stoddard solvent is low. However, it is very hazardous if even a few ml are aspirated (breathed into the lungs). Aspiration can occur easily with Stoddard solvent during ingestion or vomiting. It can cause severe lung injury and may even be fatal. Ingestion is not a typical route of occupational exposure. (1)

Asphalt: No information available.

Effects of Long-Term (Chronic) Exposure

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: Repeated or prolonged contact may cause irritation. (2)

Aluminium: One recent report indicates that aluminium can be absorbed through the skin of mice following long-term application of a water soluble salt (aluminium chloride hexahydrate). This study indicates that long-term skin contact may contribute to overall exposure and accumulation of aluminium in the body. The relevance of this finding to aluminium metal is not known. Considering the widespread use of aluminium, only a very few cases of potential sensitization have been reported and very few details of the cases are available. If aluminium is a true allergen, which is doubtful, the allergy is considered very rare. (1)

Stoddard Solvent: Repeated or prolonged contact with the skin can cause irritation. Case reports indicate that when Stoddard solvent is allowed to remain in close contact with skin, as when clothing wet with Stoddard solvent is worn, blisters and sores may develop. (1)

INHALATION

Xylene: See effects described below.

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

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 xylene 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)

Aluminium: A link between exposure to aluminium or aluminium compounds and Alzheimer's disease or other neurological diseases has been suggested. At present, whether or not this association is a true effect is controversial and findings are inconsistent. Recent reviewers have concluded that the evidence is inadequate to establish a link between occupational exposure to aluminium and specific effects on the nervous system or Alzheimer's disease, in normal, healthy workers. (1)

Stoddard Solvent: Chronic organic solvent intoxication is the name given to a pattern of nervous system effects resulting from heavy exposure to a variety of organic solvents. It is a rare condition and seems to develop only after repeated overexposures. Symptoms include headache, dizziness, reduced memory, tiredness, joint pain, sleep disturbances, pain, numbness and tingling in the fingers and toes, decreased manual dexterity, depression, irritability, emotional instability, reduced ability to concentrate and nausea. The severe forms of chronic organic solvent intoxication may be reversible or only slowly reversible. (1)

Asphalt: 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)

Stoddard Solvent: Decreased bone marrow cell production (aplastic anaemia) has been seen in people exposed repeatedly for long periods (months to years) to Stoddard solvent. It has been suggested that the presence of benzene may have been responsible for the aplastic anaemia. Benzene exposure is recognized as a cause of aplastic anaemia. Current commercial products of Stoddard solvent contain only trace amounts of benzene (less than 10 ppm). (1)

Asphalt, Aluminium: 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)

Stoddard Solvent: There is one case report of a worker developing kidney injury after intense, unprotected skin and inhalation exposures to Stoddard solvent 6 hours/day for one year. The worker experienced significant acute toxicity as a result of this exposure. There is one case report (1940) of a worker developing liver injury, as well as anaemia and stomach disorders, after working with his hands immersed or wet with Stoddard solvent for 3 months. (1)

Asphalt, Aluminium: No information available.

HEARING

Xylene: There is evidence that long-term exposure to solvent mixtures including xylenes may cause hearing loss. The simultaneous exposure to noise and solvents appears to enhance this effect. However, the limited information available does not allow a conclusion to be drawn specifically for Xylene (mixed isomers). (1)

CARCINOGENICITY

Xylene: The International Agency for Research on Cancer (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). 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)

Aluminium: IARC has not evaluated the carcinogenicity of this chemical. ACGIH has designated this chemical as not classifiable as a human carcinogen (A4). (Aluminium metal and insoluble compounds). NTP has not listed this chemical in its report on carcinogens. (1)

Stoddard Solvent: IARC has concluded that this chemical is not classifiable as to its carcinogenicity to humans (Group 3). ACGIH has not assigned a carcinogenicity designation to this chemical. NTP has not listed this chemical in its report on carcinogen. (1)

Asphalt: No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

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)

Aluminium: There is no specific information available for metallic aluminium. (1)

Stoddard Solvent: Two studies have made associations between exposure to white spirit (Stoddard solvent) and birth defects. No conclusions can be drawn because of small numbers, other exposures and other limiting factors. (1)

Asphalt: No information available.

REPRODUCTIVE TOXICITY

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

Aluminium: There is no specific information available for metallic aluminium. (1)

Stoddard Solvent: No human or animal information available. (1)

Asphalt: No information available.

MUTAGENICITY

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)

Aluminium: There is no human information available. (1)

Stoddard Solvent: No mutagenic when tested on cultured human blood cells (in vitro). (1)

Asphalt: 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)

Aluminium: There is no information available. (1)

Stoddard Solvent: No information available. (1)

Asphalt: 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)

Aluminium: Aluminium is absorbed only to a limited degree from either the gastrointestinal tract or the lungs, and is rapidly excreted in the urine. A certain amount of tissue uptake does occur. (1)

Stoddard Solvent: Because of its solubility in fat, Stoddard solvent may accumulate in fat to some extent. (1)

Asphalt: 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: 30°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; reactive hydrocarbons, low molecular weight aldehydes (e.g. acetaldehyde).

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. Shut off source of leak if you can do it without risk. Contain the spill. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. 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 this product according to local environmental regulations.

SECTION VII: HANDLING AND STORAGE

HANDLING

This product and its vapours are 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:	Liquid
ODOR AND APPEARANCE:	Aluminium-colour viscous liquid 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):	1.20 kg/L
SOLUBILITY IN WATER (20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT:	380 g/L
VISCOSITY:	2 300 Centipoises (Visco Brookfield LVT)

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

LD₅₀ (oral, rat): 3 523 mg/kg

Stoddard Solvent: (1)

LC₅₀ (rat): > 1 300 ppm (4-hour exposure)

LD₅₀ (oral, rat): > 5 000 mg/kg

LD₅₀ (dermal, rabbit): > 3 000 mg/kg

Asphalt, Aluminium: 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)

Stoddard Solvent: Short-term animal studies have shown depression in the CNS and irritation of the eyes, nose and throat. (1)

Asphalt, Aluminium: No information available.

EYE IRRITATION

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

Aluminium: Slight inflammation and small lens cloudiness (opacities) have been observed in rabbits following implantation of aluminium particles in the eye. (1)

Stoddard Solvent: Stoddard solvent is a mild eye irritant. (1)

Asphalt: No information available.

SKIN IRRITATION

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

Aluminium: No irritation was observed in rabbits following application of a compound containing 96.7% atomized aluminium to intact or abraded skin. (1)

Stoddard Solvent: Stoddard solvent is a moderate skin irritant. (1)

Asphalt: No information available.

Effects of Long-Term (Chronic) 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)

Stoddard Solvent: Long-term animal studies have shown only lung irritation and slight liver and kidney effects. (1)

SKIN SENSITIZATION

Aluminium: Negative results were obtained in guinea pigs in tests using a compound containing 96.7% atomized aluminium. (1)

Stoddard Solvent: No sensitization seen when tested on Guinea pigs. (1)

CARCINOGENICITY

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

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

Asphalt: No information available.

REPRODUCTIVE EFFECTS

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

Asphalt, Aluminium: 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)

Aluminium: There is no specific information available for metallic aluminium. (1)

Stoddard Solvent: No foetal effects were reported following maternal exposure of rats to 100 or 300 ppm white spirits 6 hours/day during pregnancy. (1)

Asphalt: No information available.

MUTAGENICITY

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)

Aluminium: Negative results were obtained for aluminium in an in vitro test using bacteria. (1)

Stoddard Solvent: Stoddard solvent injected into mice, or rat bone marrow, did not produce chromosomal aberrations. It did not induce mutations in sperm of male rats exposed prior to mating. No mutagenicity was seen in tests with bacteria or mouse lymphoma cells. (1)

Asphalt: 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 1263
SHIPPING NAME: Paint
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 023

For information: 1 800 567-1492

The Material Safety Data Sheets of RESISTO Canada are available on Internet at the following site: www.resisto.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.