






CURAL

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG and DOT (Pictograms)
 	B2 - D2A D2B	 	

SECTION I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Cural		Code of MSDS : DRU 1011E-1.01
Scientific Name : Not applicable Chemical Family : Hydrocarbons Formula : Not applicable, mixture Molecular weight : Not applicable Synonyms : Not applicable	Print date: 2001-06-05 Revision date: June 5, 2001 Revised by : Health and Safety Supervisor Marie-Claude Fontaine (800) 567-1492 mcfontaine@soprema.ca	This MSDS supersedes August 14, 2001.
Use : Used as a bituminous waterproofing coating and as resaturant over aged waterproofing surfaces.	In case of emergency : SOPREMA (8:00am to 5:00pm): (800) 567-1492 CANUTEC (Canada): (613) 996-6666 CHEMTREC (USA): (800) 424-9300 Poison Control Centre: Consult local telephone directory.	
Manufacturer : Soprema Canada 1675 Haggerty Street Drummondville (Quebec) J2C 5P7 CANADA Telephone number : (800) 567-1492	Distributor : Soprema Inc. 44955 Yale Road West Chilliwack (BC) V2R 4H3 CANADA Telephone number : (604) 793-7100	Distributor : Soprema USA 310 Quadral Drive Wadsworth (Ohio) 44281 UNITED STATES Telephone number : (800) 356-3521

EMERGENCY OVERVIEW!!!

Aluminium-colour, liquid with solvent odour. Caution! This product and its vapours are flammable. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion. Harmful to fish and other water organisms.

SECTION II. COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS #	% Weight	Exposure limit TLV-TWA	LD 50 route, species (RTECS)	CL 50 route, species (RTECS)
Asphalt	8052-42-4	30-60	5 mg/m ³ (ACGIH, 1998) (asphalt fumes)	Not available	Not available
Styrene butadiene styrene copolymer	9003-55-8	1-5	5 mg/m ³ (respirable part) (OSHA, 1997) 15 mg/m ³ (total dust) (OSHA, 1997) 3 mg/m ³ (respirable part) (ACGIH, 1998) 10 mg/m ³ (total dust) (ACGIH, 1998)	Not available	Not available
Xylene	1330-20-7	10-30	100 ppm (435 mg/m ³) (ACGIH, 1999)	4300 mg/kg oral, rat 4350 mg/kg dermal, rabbit	5000 ppm/4h inhalation, rat
Mineral Spirits	64742-47-8	5-10	Not available	Not available	Not available
Aluminium	7429-90-5	10-30	10 mg/m ³ (ACGIH, 1999)	Not available	Not available
Alumino Silicate	37244-96-5	10-30	5 mg/m ³ (respirable part) (OSHA, 1997) 15 mg/m ³ (total dust) (OSHA, 1997) 3 mg/m ³ (respirable part) (ACGIH, 1998) 10 mg/m ³ (total dust) (ACGIH, 1998)	Not available	Not available

SECTION III. HAZARDS IDENTIFICATION

SKIN CONTACT :	Frequent or prolonged contacts may cause skin irritation and dermatitis.
EYE CONTACT :	The vapours may cause eye irritation, redness and pain.
INHALATION :	This product may be irritating to the nose, throat and respiratory tract. Inhalation can cause headaches, dizziness, nausea, vomiting, hearing loss, heart arrhythmia, liver and kidney attack, a depression of central nervous system, coma.
INGESTION :	This product may cause irritation, mouth and throat burns and abdominal pains. It may also have the same effects as inhalation.
SKIN ABSORPTION :	Xylene may be absorbed through skin.

SECTION IV. FIRST AID MEASURES

SKIN CONTACT :	Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, get medical attention.
EYE CONTACT :	Flush thoroughly with water for at least 15 minutes. If irritation persists, get medical attention.
INHALATION :	In case of gas or vapour inhalation, move victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, give respiratory assistance. Obtain medical assistance.
SWALLOWING :	Do not induce vomiting. Immediately contact local poison control centre. Should vomiting occur, be sure to keep the victim's head below hips to avoid aspiration of vomit into the lungs. Maintain the victim at rest and obtain immediate medical attention.

SECTION V. FIRE-FIGHTING MEASURES

Flammability : Flammable 1C (NFPA)

Flash Points : 29.5°C (ASTM D93)

Auto-ignition Temperature : 527°C (xylene)

Inflammability limits in air : (% in volume)

- Lower limit : 1 (xylene)

- Upper limit : 12,3 (xylene)

FIRE AND EXPLOSION HAZARDS : Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion. Vapours from this product are heavier than air and may travel to a source of ignition, some distance away, and then flash back to the point of product discharge causing an explosion and fire. Do not cut, puncture or weld on or near empty containers. Always stay away from containers because of the high risk of explosion.
The contact of the product with water, acids and strong bases or of alcohol can react and form flammable gas of hydrogen.

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

FIRE FIGHTING INSTRUCTIONS : Irritating and/or gases or fumes may be generated by thermal decomposition or combustion. Approach fire from upwind. Evacuate area 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. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standard CAN/CSA-Z94.4.-93 of CSA, standard 29 CFR 1910.134 of OSHA or standard Z88.2 of ANSI. 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.

Do not use CO₂, Sodium bicarbonate, halogenated extinguishing agents, foam.

Smother fire with dry sand, dry inert powder or granular (clay - limestone) or approved dry powder extinguishing agent Class D.

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 the local 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 containers.
If you spray on a large surface, it is recommended to wear a mouth and nose mask appropriate for this product.

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 authorised 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 of nitrile rubber, polyalcohol.
RESPIRATORY :	If the TLV is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with standards CAN/CSA-Z94.4-93 of CSA, 29 CFR 1910.134 of OSHA, Z88.2 of ANSI or ACNOR-Z194.4-93.
EYES :	Wear chemical safety goggles in accordance with standard ACNOR-Z94.3-92.
FEET :	Work shoes in accordance with standard ACNOR-Z195-M92.
BODY :	Wear adequate protective clothes.
OTHERS :	Eye bath and safety shower.
CONTROL OF VAPORS:	Local exhaust is needed to control vapour and dust level to below recommended limits.

SECTION IX : PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid	ODOUR AND APPEARANCE :	Aluminium-colour, liquid with solvent odour.
ODOR THRESHOLD :	Not Available	VAPOR PRESSURE (20°C) :	Not available
VAPOR DENSITY (air = 1):	Heavier than air	PERCENT VOLATILE (% by volume) :	10-40%
EVAPORATION RATE (Butyl acetate = 1) : 0,72 (xylene)		BOILING POINT (760mm Hg) :	Not Available
FREEZING POINT :	Not Available	SPECIFIC GRAVITY (H₂O = 1) :	1,2 kg/L
SOLUBILITY IN WATER (20°C) :	Insoluble	Volatile Organic Compound (V.O.C.) content :	400 g/L
VISCOSITY : 2300 Centipoises (Visco Brookfield LVT at 25°C, Speed : 30)			

SECTION X : STABILITY AND REACTIVITY

STABILITY :	This material is stable.	CONDITIONS OF REACTIVITY:	Avoid excessive heat
INCOMPATIBILITY :	Basis and strong oxidising agents Inorganic acids (Strong Lewis)	HAZARDOUS DECOMPOSITION PRODUCTS :	Flammable gas of hydrogen.
HAZARDOUS POLYMERISATION : None			

SECTION XI : TOXICOLOGICAL INFORMATION

ACUTE EXPOSURE : (short term)	People exposed to high concentrations of aromatic solvents may show signs of loss of hearing, shrillness, and brain, liver and kidney damage. Tearing, gastrointestinal disturbances, central nervous system depression (nausea, vomiting, dizziness, paresthesia, ataxia), loss of appetite. Severe intoxication: narcosis, possible kidney and liver insufficiencies, pulmonary and cardiac injuries and death.		
CHRONIC EXPOSURE : (long term)	Possibility of skin sensitisation, dermatosis, eczema, central nervous system depression, equilibrium disorders, loss of memory, anaemia, hypertrophy of the liver, possible lung and kidney injuries.		
CARCINOGENICITY :	Some of the components of this product are listed as carcinogenic for humans. Refer to Section XV.		
TERATOGENICITY :	Xylene induced embryotoxic and teratogenic effects in rats.		
IRRITANT MATERIAL :	Xylene may cause irritation effects to the skin, eyes, nose and throat.		
LD 50 OF MATERIAL :	Not Available.	LC 50 OF MATERIAL :	Not Available.
MUTAGENICITY :	None known.	SENSITISATION :	None known.
REPRODUCTIVE EFFECTS :	Studies conducted by NTP on animals show that xylene has effects on reproduction.		
SYNERGISTIC MATERIALS :	<ul style="list-style-type: none"> Xylene : Exposure to related solvents (benzene, toluene and ethanol) slows the rate of clearance of xylenes from the body, thus enhancing its toxic effects. 		

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 regulations 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.

ECOTOXICITY : Xylene may be harmful to aquatic life at low concentrations.

FISH TOXICITY : (xylene)

- 96-hour TLm = 8,05 mg/L (Rainbow Trout)
- 96-hour TLm = 16,1 mg/L (Fathead Minnow and Bluegill Sunfish)

BIODEGRADABILITY : Biodegradable (slow). Rapid volatilisation. Aromatic hydrocarbons may be bioaccumulative but they have no food chain concentration potential. Can be dangerous if allowed to enter drinking water intakes.

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

NAME OF PRODUCT :	Cural	IDENTIFICATION NUMBER :	UN 1263
CLASSIFICATION (TDG - DOT) :	Class 3	SHIPPING NAME :	Paint
Containers follow the standards of :		PACKING GROUP :	III
<ul style="list-style-type: none"> • Canada : CAN / CGSB-43.150-97 • USA : CFR 49 parts 100 to 199 			
SPECIAL INSTRUCTIONS FOR SHIPPING : Always supply shipping manifest with the Material Safety Data Sheet of the product.			

SECTION XV : REGULATORY INFORMATION

WHMIS: Class B2: Flammable liquid (flash point below 37.8°C).
 Class D2A: Very toxic material causing other effects (xylene has teratogenicity and embryotoxicity effects on animals).
 Class D2B: Toxic material causing other effects (xylene and asphalt have irritant effects).

OSHA : This product meets criteria for hazardous material as defined by 29 CFR 1910.1200.
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).
IARC : The ingredients of this product are not classified carcinogenic by IARC.
ACGIH : The ingredients of this product are not classified carcinogenic by ACGIH.

USA- STATE-TO-KNOW LISTS :

Florida Substance List : asphalt, xylene are present.
Massachusetts Right-To-Know List : asphalt, xylene are present.
Minnesota Hazardous Substances List : asphalt, xylene are present.
New Jersey Department of Health Right-To-Know List : asphalt, xylene are present.
New Jersey Right-To-Know Special Hazardous Substance : xylene is present.
Pennsylvania Right-To-Know List : asphalt, xylene are present.
Rhode Island Hazardous Substance List : asphalt, xylene are present.
California Director's List of Hazardous Substances : asphalt, xylene are present.

WHMIS (USA) :	Health Hazard :	2	NFPA (USA) :	Fire Hazard :	3
	Fire Hazard :	3		Reactivity :	0
	Reactivity :	0		Health :	2
	Personal protection :	2		Specific Hazard :	1

SECTION XVI: OTHER INFORMATION

Glossary :

ACGIH :	American Conference of Governmental Industrial Hygienists
ANSI :	American National Standards Institute
ASTM:	American Society for Testing and Materials
CAS :	Chemical Abstract Services
CFR :	Code of Federal Regulations (United States)
CSA :	Canadian Standardisation Association
DOT:	Department of Transportation (United States)
DSL :	Domestic Substances List (Canada)
LC50:	(Lethal concentration ₅₀) Concentration of a substance in air that causes death of 50% mortality of a defined animal population
LD50:	(Lethal dose ₅₀) Single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population.
EPA :	Environmental Protection Agency (United States)
HMIS :	Hazardous Material Information System
IARC :	International Agency for Research on Cancer
NFPA :	National Fire Protection Association (United States)
NIOSH :	National Institute for Occupational Safety and Health
NTP :	National Toxicology Program
OSHA :	Occupational Safety & Health Administration (United States)
PEL :	Permissible Exposure Limit
RCRA :	Resource Conservation and Recovery Act (United States)
RTECS:	Registry of Toxic Effects of Chemical Substances
TDG :	Transportation of Dangerous Goods
TLV :	Threshold Limit Value
TWA :	Time-weighted average
TSCA :	Toxic Substances Control Act (United States)
WHMIS :	Workplace Hazardous Materials Information System (Canada)

Justification of the update :

- D2A has been added to the WHMIS Classification.

References: Available upon request
This MSDS has been prepared by : **Marie-Claude Fontaine**
For more information: **SOPREMA Canada 1-800-567-1492**

The Material Safety Data Sheets of SOPREMA Canada are available on Internet at the following site : <http://soprema.ca/msds>

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

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