SAFETY DATA SHEET



Urethane Sealant for Concrete, Terra-Cotta & Slate

Section 1. Identification

Product identifier	: Urethane Sealant for Concrete, Terra-Cotta & Slate
Product code	: Not available.
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	f the substance or mixture and uses advised against
Product use	: Sealant for concrete, terra-cotta and slate.
Area of application	: Professional applications.
Supplier/Manufacturer	: Techniseal 300, avenue Liberté Candiac, QC, Canada, J5R 6X1 Tel: (514) 523-2110 Toll free: 1-800-465-7325 Fax: (450) 633-3035
e-mail address of person responsible for this SDS	: service@techniseal.com
Emergency telephone number (with hours of operation)	: CANUTEC (613) 996-6666

Section 2. Hazard identification

Classification of the	: H226	FLAMMABLE LIQUIDS - Category 3
substance or mixture	H317	SKIN SENSITIZATION - Category 1
	H351 H361	CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Fertility) - Category 2
	H361	TOXIC TO REPRODUCTION (Pertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2
	H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1
	H304	ASPIRATION HAZARD - Category 1
GHS label elements		
Hazard pictograms		\land \land
Signal word	: Danger	
	: H226 - Flam H317 - May H361 - Susp H351 - Susp H304 - May	mable liquid and vapor. cause an allergic skin reaction. ected of damaging fertility or the unborn child. ected of causing cancer. be fatal if swallowed and enters airways. res damage to organs through prolonged or repeated exposure. (centra

: No previous validation

Version :1

Date of issue/Date of revision	: 08/05/2019	Date of previous issue
--------------------------------	--------------	------------------------

Section 2. Hazard identification

Prevention	: P201 - Obtain special instructions before use.
	P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapor.
	P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
	P272 - Contaminated work clothing should not be allowed out of the workplace.
Response	: P314 - Get medical attention if you feel unwell. P308 + P313 - IF exposed or concerned: Get medical attention.
	P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
	P333 + P313 - If skin irritation or rash occurs: Get medical attention.
Storage	: P405 - Store locked up.
Disposal	 P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 30.1%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 89%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 89%

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Ingredient name	% (w/w)	CAS number
Stoddard solvent	30 - 60 (1)	8052-41-3
tert-butyl acetate	5 - 10 (1)	540-88-5
Distillates (petroleum), hydrotreated light	5 - 10 (1)	64742-47-8
Naphtha (petroleum), hydrotreated heavy	0.1 - 1 (1)	64742-48-9
2-ethylhexanoic acid, zirconium salt	0.1 - 1 (1)	22464-99-9
xylene	0.1 - 1 (1)	1330-20-7
2-butanone oxime	0.1 - 1 (1)	96-29-7

(1) The actual concentration or actual concentration range is withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necess	sary first aid measures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects			
Eye contact :	No known significant effects or critical hazards.		
Inhalation :	No known significant effects or critical hazards.		
Skin contact :	May cause an allergic skin reaction.		
Ingestion :	May be fatal if swallowed and enters airways.		
Over-exposure signs/symptor	<u>ns</u>		
Eye contact :	No specific data.		
Inhalation :	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations		
Skin contact :	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations		
Ingestion :	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations		

Section 4. First-aid measures

Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	

See toxicological information (Section 11)

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Date of issue/Date of revision	: 08/05/2019	Date of previous issue	: No previous validation	Version	:1	4/15

Section 6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store between the following temperatures: 5 to 25°C (41 to 77°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

<u>Control parameters</u> <u>Occupational exposure limits</u>

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Stoddard solvent	CA Alberta Provincial (Canada, 6/2018).
	 8 hrs OEL: 572 mg/m³ 8 hours. 8 hrs OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada, 7/2018). TWA: 290 mg/m³ 8 hours. STEL: 580 mg/m³ 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. TWAEV: 525 mg/m³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
tert-butyl acetate	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 950 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 7/2018). TWA: 200 ppm 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 200 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 200 ppm 8 hours. TWAEV: 950 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 250 ppm 15 minutes. TWA: 200 ppm 8 hours.
Distillates (petroleum), hydrotreated light	CA British Columbia Provincial (Canada, 7/2018). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapour) 8 hours. CA Alberta Provincial (Canada, 6/2018). Absorbed through skin. 8 hrs OEL: 200 mg/m ³ , (as total hydrocarbon vapour) 8 hours. CA Ontario Provincial (Canada, 1/2018). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapour) 8 hours.
2-ethylhexanoic acid, zirconium salt	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 5 mg/m ³ , (as Zr) 8 hours. 15 min OEL: 10 mg/m ³ , (as Zr) 15 minutes. CA British Columbia Provincial (Canada, 7/2018). TWA: 5 mg/m ³ , (as Zr) 8 hours. STEL: 10 mg/m ³ , (as Zr) 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m ³ , (as Zr) 8 hours. STEV: 10 mg/m ³ , (as Zr) 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 10 mg/m ³ , (as Zr) 15 minutes.

Canada

Section 8. Exposure controls/personal protection

	TWA: 5 mg/m ³ , (as Zr) 8 hours.
xylene	CA Alberta Provincial (Canada, 6/2018).
	8 hrs OEL: 100 ppm 8 hours.
	15 min OEL: 651 mg/m ³ 15 minutes.
	15 min OEL: 150 ppm 15 minutes.
	8 hrs OEL: 434 mg/m ³ 8 hours.
	CA British Columbia Provincial (Canada,
	7/2018).
	TWA: 100 ppm 8 hours.
	STEL: 150 ppm 15 minutes.
	CA Quebec Provincial (Canada, 1/2014).
	TWAEV: 100 ppm 8 hours.
	TWAEV: 434 mg/m ³ 8 hours.
	STEV: 150 ppm 15 minutes.
	STEV: 651 mg/m ³ 15 minutes.
	CA Ontario Provincial (Canada, 1/2018).
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
2-butanone oxime	AIHA WEEL (United States, 7/2018). Skin
	sensitizer.
	TWA: 10 ppm 8 hours.

Appropriate engineering : controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure : controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	

Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance		
Physical state	1	Liquid.
Color	:	Brown.
Odor	1	Mineral spirits
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	<-70°C (<-94°F)
Boiling point	1	>160°C (>320°F)
Flash point	1	Closed cup: 43°C (109.4°F)
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not applicable.
Lower and upper explosive	:	Not available.
(flammable) limits		
Vapor pressure	1	Not available.
Vapor density	1	Not available.
Relative density	1	Not available.
Density	1	0.89 to 0.91 g/cm ³
Solubility	1	Not available.
Partition coefficient: n-	1	Not available.
octanol/water		
Auto-ignition temperature	4	Not available.
Decomposition temperature	4	Not available.
Viscosity	4	Not available.
Flow time (ISO 2431)	4	Not available.

Section 10. Stability and reactivity

	,
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: acids. Peroxide.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
tert-butyl acetate	LD50 Oral	Rat	4100 mg/kg	-
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Dusts and mists	Rat	8500 mg/m ³	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
2-ethylhexanoic acid, zirconium salt	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
xylene	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
2-butanone oxime	LD50 Oral	Rat	930 mg/kg	-

Conclusion/Summary

nary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
tert-butyl acetate	Eyes - Mild irritant	Rabbit	-	100 microliters	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
2-butanone oxime	Eyes - Severe irritant	Rabbit	-	100 microliters	-

Conclusion/Summary

Date of issue/Date of revision

: 08/05/2019 Date of previous issue

: No previous validation

Version : 1

Section 11. Toxicological information

		•		
Skin	:	Not available.		
Eyes	:	Not available.		
Respiratory	:	Not available.		
Sensitization				
Conclusion/Summary				
Skin	:	Not available.		
Respiratory	:	Not available.		
Mutagenicity				
Conclusion/Summary	:	Not available.		
Carcinogenicity				
Conclusion/Summary	:	Not available.		
Reproductive toxicity				
Conclusion/Summary	:	Not available.		
Teratogenicity				
Conclusion/Summary	:	Not available.		
Specific target organ toxicity (single exposure)				

Name	Category	Route of exposure	Target organs
Distillates (petroleum), hydrotreated light Naphtha (petroleum), hydrotreated heavy	Category 3 Category 3 Category 3	Not applicable. Not applicable. Not applicable.	Narcotic effects Narcotic effects Respiratory tract irritation
xylene	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	•••	Route of exposure	Target organs
Stoddard solvent	Category 1	Not determined	central nervous system (CNS)
xylene	Category 2	Not determined	hearing organs, kidneys, liver and nervous system

Aspiration hazard

Name	Result
Urethane Sealant for Concrete, Terra-Cotta & Slate	ASPIRATION HAZARD - Category 1
Stoddard solvent	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1

Information on the likely

: Routes of entry anticipated: Oral, Dermal, Inhalation.

routes of exposure

Potential acute health effects Eye contact : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. **Skin contact** : May cause an allergic skin reaction.

Date of issue/Date of revision	: 08/05/2019	Date of previous issue	: No previous validation
--------------------------------	--------------	------------------------	--------------------------

4.5

Ingestion	: May be fatal if swallowed and enters airways.
Symptoms related to the phy	sical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Conclusion/Summary	: Not available.
General	: Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to ver low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Urethane Sealant for Concrete, Terra-Cotta & Slate tert-butyl acetate	5745.1	N/A	N/A	N/A	N/A
	4100	N/A	N/A	N/A	N/A
Naphtha (petroleum), hydrotreated heavy	N/A	N/A	N/A	N/A	8.5
xylene	4300	1100	N/A	N/A	N/A
2-butanone oxime	930	1100	N/A	N/A	N/A

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
tert-butyl acetate	Acute EC50 6.1 mg/l Fresh water	Algae	72 hours
-	Acute EC50 350 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 240 mg/l Fresh water	Fish	96 hours
	Acute NOEC 2.3 mg/l Fresh water	Algae	72 hours
	Acute NOEC 180 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 56 mg/l Fresh water	Fish	96 hours
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
xylene	Acute LC50 8.5 ppm Marine water	Crustaceans - Palaemonetes pugio - Adult	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
2-butanone oxime	Acute EC50 6.09 mg/l Fresh water	Algae - Scenedesmus capricornutum	72 hours
	Acute LC50 843000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 1.02 mg/l Fresh water	Algae - Scenedesmus capricornutum	72 hours
	Acute NOEC 93 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Chronic NOEC ≥100 mg/l Fresh water	Fish - Oryzias latipes	14 days

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
tert-butyl acetate	OECD 301D Ready Biodegradability - Closed Bottle Test	50 % - Inherent - 28 days	-	-
2-ethylhexanoic acid, zirconium salt	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	73.82 % - Readily - 28 days	-	Activated sludge
xylene	OECD 301F Ready Biodegradability - Manometric Respirometry Test	98 % - Readily - 28 days	-	-

Section 12. Ecological information

Conclusion/Summary	: Not available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
tert-butyl acetate 2-ethylhexanoic acid, zirconium salt	-	-	Inherent Readily
xylene 2-butanone oxime	-	-	Readily Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Stoddard solvent	3.16 to 7.06	-	high
tert-butyl acetate	1.64	-	Iow
Naphtha (petroleum),	-	10 to 2500	high
hydrotreated heavy 2-ethylhexanoic acid, zirconium salt	-	2.96	low
xylene	3.12	8.1 to 25.9	low
2-butanone oxime	0.63	2.5 to 5.8	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

: The generation of waste should be avoided or minimized wherever possible. **Disposal methods** Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Stoddard solvent, tert-butyl acetate)	Flammable liquids, n.o.s. (Stoddard solvent, tert-butyl acetate)	FLAMMABLE LIQUID, N.O.S. (Stoddard solvent, tert-butyl acetate)	FLAMMABLE LIQUID, N.O.S. (Stoddard solvent, tert-butyl acetate)	Flammable liquid, n.o.s. (Stoddard solvent, tert-butyl acetate)
Date of issue/Date of revision : 08/05/2019 Date of previous issue : No previous validation Version : 1 13/15					

Section 14. Transport information

Section 14. Transport information						
Transport hazard class(es)	3	3	3	3	3	
Packing group	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		
Environmental hazards	No.	No.	No.	No.	No.	
Additional information Additional Information	on : Prod Goc <u>Exp</u> Pas	ods Regulations: Iosive Limit and	2.18-2.19 (Class 3) d Limited Quantity g Road or Rail Ind). <u>7 Index</u> 5	sportation of Dangerous	
DOT Classificatio	on : This vess liqui <u>Lim</u> Qua	s product may be sel or aircraft. No ds are not regula <u>ited quantity</u> Ye <u>kaging instruct</u> antity limitation	re-classified as "C on-bulk packages (ated as hazardous r	less than or equal t naterials. 0. Non-bulk: 203. I rail: 60 L. Cargo ai		
ADR/RID	<u>Lim</u> Spe	ard identificatic ited quantity 5 cial provisions nel code (D/E)	L			
IMDG		ergency schedu cial provisions				
ΙΑΤΑ	355 Pas	 Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344. Special provisions A3 				
Special precautio	upr	•	Ensure that person	• •	osed containers that are product know what to do	
Transport in bulk to Annex II of MAI the IBC Code	• • • • • • • • • • • • • • • • • • •	available.				

Section 15. Regulatory information

Canadian lists Canadian NPRI : The following components are listed: stoddard solvent; hydrotreated light distillate **CEPA Toxic substances** : The following components are listed: Volatile organic compounds exclusions; 2-Butanone, oxime **Canada inventory** : Not determined. **International regulations** Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed. **Montreal Protocol** Date of issue/Date of revision :08/05/2019 Date of previous issue Version :1 14/15 : No previous validation

Canada

Section 15. Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 08/05/2019
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: Sphera Solutions
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 2	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED	Calculation method
EXPOSURE) (central nervous system (CNS)) - Category 1	
ASPIRATION HAZARD - Category 1	Expert judgment

References

: HPR = Hazardous Products Regulations

V Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.