SAFETY DATA SHEET

NITRO-VYNIL SEALER



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Causes damage to organs. (liver)

Section 2. Hazard identification

May cause drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure. (respiratory system)
: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
: Get medical attention if you feel unwell. IF exposed or concerned: Call a POISON CENTER or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
: Store locked up.
: Dispose of contents and container in accordance with all local, regional, national and international regulations.
: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4%

Section 3. Composition/information on ingredients

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

Ingredient name	% (w/w)	CAS number	
n-butyl acetate	10 - 20	123-86-4	
acetone	10 - 20	67-64-1	
methanol	10 - 20	67-56-1	
toluene	5 - 10	108-88-3	
Talc , not containing asbestiform fibres	1 - 5	14807-96-6	
bis(2-ethylhexyl) phthalate	1 - 5	117-81-7	
ethylbenzene	0.1 - 1	100-41-4	

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 necessary 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. If necessary, call a poison center or physician.

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Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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	: Flush contaminated skin with plenty of 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. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. 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 sympt	oms/effects, acute and delayed
Potential acute healt	h effects
Eye contact	: Causes serious eye irritation.
Inhalation	: Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation.
Ingestion	: Harmful if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs	<u>/symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness 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

Section 4. First-aid measures

Ingestion	:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate med	dica	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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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)

Section 5. Fire-fighting measures

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	: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/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 non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
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".	

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Section 6. Accidental release measures

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 co	onta	ainment and cleaning up
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). 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 ingest. 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 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.

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
n-butyl acetate	CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
acetone	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1200 mg/m³ 8 hours. 15 min OEL: 1800 mg/m³ 15 minutes. 8 hrs OEL: 500 ppm 8 hours. 15 min OEL: 750 ppm 15 minutes. CA British Columbia Provincial (Canada, 5/2015). TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 500 ppm 8 hours. STEV: 1000 ppm 8 hours. STEV: 1000 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 750 ppm 15 minutes. TWAEV: 500 ppm 8 hours. STEV: 2380 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 750 ppm 15 minutes. TWA: 500 ppm 8 hours.
methanol	CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 262 mg/m ³ 8 hours. 8 hrs OEL: 200 ppm 8 hours. 15 min OEL: 250 ppm 15 minutes. 15 min OEL: 328 mg/m ³ 15 minutes. CA British Columbia Provincial (Canada, 5/2015). Absorbed through skin. TWA: 200 ppm 8 hours. STEL: 250 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). Absorbed through skin.

		TWA: 200 ppm 8 hours. STEL: 250 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). Absorbed through skin. TWAEV: 200 ppm 8 hours. TWAEV: 262 mg/m ³ 8 hours. STEV: 250 ppm 15 minutes. STEV: 328 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 250 ppm 15 minutes. TWA: 200 ppm 8 hours.
	toluene	CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). Absorbed through skin. TWAEV: 50 ppm 8 hours. TWAEV: 188 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
	Talc , not containing asbestiform fibres	CA British Columbia Provincial (Canada, 5/2015). TWA: 2 mg/m ³ 8 hours. Form: Respirable TWA: 0.1 f/cc 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 3 mg/m ³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 7/2015). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction. TWA: 2 f/cc 8 hours. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 2 mg/m ³ 8 hours. Form: Respirable particulate CA Saskatchewan Provincial (Canada, 7/2013). TWA: 2 mg/m ³ 8 hours. Form: respirable fraction
	bis(2-ethylhexyl) phthalate	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). TWA: 5 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 3 mg/m ³ 8 hours. STEL: 5 mg/m ³ 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m ³ 8 hours. STEV: 10 mg/m ³ 15 minutes.
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	CA Saskatchewan Provincial (Canada, 7/2013). STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours.
ethylbenzene	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 100 ppm 8 hours. 8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes. CA British Columbia Provincial (Canada, 5/2015). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. STEV: 125 ppm 15 minutes. STEV: 543 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 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.
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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. 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: chemical splash goggles.
Skin 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

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Colorless to light yellow.
Odor	: Solvent.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: >60°C (>140°F)
Flash point	: Closed cup: -18 to 23°C (-0.4 to 73.4°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.9096
Solubility	: Not available.
Solubility in water	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.
VOC	: 530.2 g/l [ISO 11890-1]
Volatility	: 85.86% (v/v), 77.72% (w/w)

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.			

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Section 10. Stability and reactivity

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
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
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
2	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
acetone	LD50 Oral	Rat	5800 mg/kg	-
methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
bis(2-ethylhexyl) phthalate	LD50 Dermal	Rabbit	25 g/kg	-
	LD50 Oral	Rat	30 g/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
•	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100	-
2				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
acetone	Eyes - Mild irritant	Human	-	186300 parts	-
				per million	
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	395	-
				milligrams	
methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				milligrams	
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
				100	
				milligrams	
	Eyes - Mild irritant	Rabbit	-	870	-
				Micrograms	
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				milligrams	
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Section 11. Toxicological information

Section 11. Toxicological information						
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-	
	Skin - Mild irritant	Rabbit	-	435 milligrams	-	
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-	
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-	
Talc , not containing asbestiform fibres	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-	
bis(2-ethylhexyl) phthalate	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Eyes - Mild irritant	Rabbit	-	500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-	

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
	Category 1 Category 2 Category 3		Not determined liver Narcotic effects
toluene	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
toluene Talc , not containing asbestiform fibres	Category 2 Category 1		Not determined respiratory system

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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Section 11. Toxicological information

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Information on the likely routes of exposure	: Not available.
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation.
Ingestion	: Harmful if swallowed. Can cause central nervous system (CNS) depression.
Symptoms related to the p	hysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness 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: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
General	:	Causes damage to organs through prolonged or repeated exposure.
Carcinogenicity	1	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	1	No known significant effects or critical hazards.
Teratogenicity	1	May damage the unborn child.
Developmental effects	:	No known significant effects or critical hazards.

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Section 11. Toxicological information

Fertility effects

: May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	640.6 mg/kg 1971.1 ppm

Section 12. Ecological information

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		ILV.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
toluene	Acute EC50 12500 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
bis(2-ethylhexyl) phthalate	Acute EC50 31000000 µg/l Marine water	Algae - Karenia brevis	96 hours
	Acute EC50 133 µg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 690 µg/l Fresh water	Fish - Ictalurus punctatus	96 hours
	Chronic NOEC 76 µg/l Marine water	Algae - Hormosira banksii - Gamete	72 hours
	Chronic NOEC 109 µg/l Fresh water	Crustaceans - Eurytemora affinis - Nauplii	21 days
	Chronic NOEC 77 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 12 µg/l Fresh water	Fish - Pimephales promelas - Adult	28 days
ethylbenzene	Acute EC50 4600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours

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Section 12. Ecological information

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	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
acetone	-0.23	-	low
methanol	-0.77	<10	low
toluene	2.73	90	low
bis(2-ethylhexyl) phthalate	7.6	1380	high
ethylbenzene	3.6	-	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

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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 DOT ADR/RID IMDG ΙΑΤΑ Classification Classification **UN number** UN1263 UN1263 UN1263 UN1263 UN1263 **UN proper** PAINT PAINT PAINT PAINT PAINT shipping name Date of issue/Date of revision : 16/10/2017 : 30/07/2018 Date of previous issue Version :1 14/17

Section 14. Transport information						
Transport hazard class(es)		3			3	
Packing group	11	II	11	11	11	
Environmental hazards	Yes.	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	
Additional information	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.	Reportable guantity 2825.2 lbs / 1282. 7 kg [372.52 gal / 1410.1 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Special</u> <u>provisions</u> 640 (C) <u>Tunnel code</u> (D/E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.	

- Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

Canadian lists							
Canadian NPRI	:	: The following components are listed: Volatile organic compounds; n-Butyl acetate; Methanol; Ethanol; Xylene (all isomers); Isopropyl alcohol; Toluene; Bis(2-ethylhexyl) phthalate					
CEPA Toxic substances	:	The following phthalate	g components are liste	ed: Volatile organic cor	npounds; Bis(2	-ethylhe	exyl)
Canada inventory	:	Not determin	ned.				
International regulations							
Chemical Weapon Conver	ition	List Schedu	les I, II & III Chemical	<u>s</u>			
Not listed.							
Montreal Protocol (Annexe	es A,	<u>B, C, E)</u>					
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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.

Inventory list

Australia	: Not determined.
China	Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Turkey	: Not determined.
United States	: Not determined.

Section 16. Other information

<u>History</u>	
Date of printing	: 30/07/2018
Date of issue/Date of revision	: 30/07/2018
Date of previous issue	: 16/10/2017
Version	: 1
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = 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) UN = United Nations HPR = Hazardous Products Regulations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 1	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 1	Calculation method

Date of issue/Date of revision

Section 16. Other information

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (liver) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) - Category 1	Calculation method

References

: Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

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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.