



Safety Data Sheet

550 VOC WHITE S.G. ULTRA SOLIDS



1. Identification

Product identifier	550 VOC WHITE S.G. ULTRA SOLIDS		
Product code	410-0025		
Other means of identification	550 VOC WHITE SEMI-GLOSS ULTRA SOLIDS.		
Recommended use of the chemical and restrictions on use	A protective and/or decorative finish or accompanying paint product. Not recommended for any other use not detailed on product data sheet or label.		
Manufacturer	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA Tel. 1-800-262-5710 Fax 1-405-262-9310 www.geminicoatings.com	Distributor	Gemini Industries, Inc. 850 Flint Road Toronto, Ontario Canada M3J 2T7 Tel. 1-800-262-5710
Emergency phone number	24-hour Emergency (Spill, Leak, Exposure or accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and MSDS Help: EMI 800-510-8510		

2. Hazard identification

Summary	Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
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WHMIS 2015/OSHA HCS 2012/GHS

Flammable liquids (Category 2)
 Skin corrosion/irritation (Category 2)
 Serious eye damage/eye irritation (Category 1)
 Carcinogenicity (Category 2)
 Reproductive toxicity (Category 2)
 Specific target organ toxicity, single exposure (Category 3)



Other hazards which do not result in classification :
 Acute hazard to the aquatic environment (Category 3).

DANGER

- H225: Highly flammable liquid and vapour
- H318: Causes serious eye damage
- H315: Causes skin irritation
- H335: May cause respiratory irritation
- H336: May cause drowsiness or dizziness
- H351: Suspected of causing cancer
- H361: Suspected of damaging fertility or the unborn child

H402: Harmful to aquatic life
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.
P240: Ground or bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing vapours, mist and spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water and soap or take a shower if necessary.
P332+313: If skin irritation occurs: Get medical advice or attention.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310: Immediately call a doctor/physician.
P308+313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see section 4 of SDS or on this label).
P362+364: Take off contaminated clothing and wash before reuse.
P370+378: In case of fire: Use the National Fire Protection Association Class B extinguisher for extinction.
P403+P235+P233: Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405: Store locked up.
P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Butyl acetate (normal)	123-86-4	20 - 22 %
Titanium dioxide	13463-67-7	18 - 20 %
n-Propanol	71-23-8	8 - 10 %
Nitrocellulose	9004-70-0	7.5 - 8.5 %
Acetone	67-64-1	6.5 - 7.5 %
Propylene glycol monomethyl ether acetate	108-65-6	5.5 - 6.5 %
Isopropyl alcohol	67-63-0	2.5 - 3.5 %
Bis(2-Ethylhexyl) adipate	103-23-1	2.5 - 3.5 %
n-Butyl Alcohol	71-36-3	0.5 - 1.5 %
Xylene	1330-20-7	0.5 - 1.5 %
Isobutyl alcohol	78-83-1	0.5 - 1.5 %
Ethylbenzene	100-41-4	0.1 - 1 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
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Skin contact	Wash skin with warm water and mild soap for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY! Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause severe eye irritation or eye damage. May cause redness, dryness or rash of the skin. May cause irritation to nose, throat and respiratory tract. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue.
Notes to the physician	Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Class B extinguishers. Dry chemicals, alcohol resistant foam, carbon dioxide (CO ₂). Do not use direct water jet.
Specific hazards arising from the chemical	Very flammable liquid and vapours. Vapours are heavier than air and may travel to an ignition source distant from the material handling point. May be ignited by heat, sparks, flame or static electricity. Do not apply to hot surfaces. Contact with strong oxidizers may cause fire. In a fire or if heated, a pressure increase will occur and the container may burst. Emits toxic fumes under fire conditions.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Water spray can reduce the intensity of the flames. However, the water jets can spread the fire. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Use non-sparking and antistatic tools. Dispose via a licensed waste disposal contractor. Finish cleaning the contaminated surface by rinsing with soapy water. PS: Rags and others materials soaked with paint or solvent may spontaneously catch fire if improperly store or discarded. Immediately after each use place rags and paper towels in a sealed water-filled metal container to prevent spontaneous combustion.

7. Handling and storage

Precautions for safe handling	Keep away from heat, sparks and open flame. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Use non-sparking and antistatic tools. Ground/bond all containers when transferring large quantities (5 gallons US or 20 L and more). Use
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only in well ventilated area. Avoid prolonged or repeated breathing of vapour or mists. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Containers of this material may be hazardous even when empty. Since empty containers retain product residues (vapour, liquid), all hazard precautions given in this sheet must be observed. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse. Rags, steel wool and paper towels soaked with this product may overheat and spontaneously ignite if piled in a heap. After use immediately store them in water-filled metal can with tight fitting lid.

Conditions for safe storage, including any incompatibilities

Storage and handling should follow the NFPA 30 Flammable and/or Combustible Liquids Code and the National Fire Code of Canada (NFCC). Store tightly closed and in properly labelled container in a dry, cool and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.

Storage temperature

10 to 25°C (50 to 77°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health

Acetone: 2500 ppm.
Titanium dioxide: 5000 mg/m³.
Isopropyl alcohol: 2000 ppm.
n-Butyl Alcohol: 1400 ppm.
n-Butyl acetate: 1700 ppm.
Isobutyl alcohol: 1600 ppm.
Xylenes: 900 ppm.
Ethylbenzene: 800 ppm.
n-Propanol: 800 ppm.

Butyl acetate (normal)	STEL		200 ppm		ACGIH , ON
			200 ppm	950 mg/m ³	RSST
	TWA (8h)		20 ppm		BC
			150 ppm		ACGIH , ON
Titanium dioxide	TWA (8h)	Total Dust	150 ppm	713 mg/m ³	RSST
				10 mg/m ³	ACGIH , BC, ON, RSST
	STEL		250 ppm	614 mg/m ³	RSST (Pc)
			100 ppm		ACGIH , BC, ON
n-Propanol	TWA (8h)		200 ppm	492 mg/m ³	RSST (Pc)
	STEL		500 ppm		ACGIH , BC
			750 ppm	1782 mg/m ³	ON
Acetone	TWA (8h)		1000 ppm	2380 mg/m ³	RSST
			250 ppm		ACGIH , BC
	STEL		500 ppm	1188 mg/m ³	ON
			500 ppm	1190 mg/m ³	RSST
Propylene glycol monomethyl ether acetate	STEL		75 ppm		BC
			50 ppm		BC , US AIHA
	TWA (8h)		50 ppm	270 mg/m ³	ON
Isopropyl alcohol	STEL		400 ppm		ACGIH , BC, ON
			500 ppm	1230 mg/m ³	RSST
	TWA (8h)		200 ppm		ACGIH , BC, ON
			400 ppm	983 mg/m ³	RSST
Xylene	STEL		150 ppm		ACGIH , BC, ON
			150 ppm	651 mg/m ³	RSST
	TWA (8h)		100 ppm		ACGIH , BC, ON
			100 ppm	434 mg/m ³	RSST
n-Butyl Alcohol	Ceiling		30 ppm		BC

		50 ppm	152 mg/m ³	RSST (Pc, RP)
	TWA (8h)	15 ppm		BC
		20 ppm		ACGIH , ON
Isobutyl alcohol	TWA (8h)	50 ppm		ACGIH , BC, ON
		50 ppm	152 mg/m ³	RSST
Ethylbenzene	STEL	125 ppm	543 mg/m ³	RSST
	TWA (8h)	20 ppm		ACGIH , BC, ON
		100 ppm	434 mg/m ³	RSST
Appropriate engineering controls	Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.			
Individual protection measures				
Eye	Wear chemical splash goggles.			
Hands	Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.			
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall suit.			
Respiratory	Respiratory protection is not required for normal use. Respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit, wear a half mask respirator with organic vapour cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapour cartridges and P100 filters.			
Feet	Wear rubber boots to clean up a spill.			

9. Physical and chemical properties

Physical state	Liquid	Flammability	Flammable
Colour	White	Flammability limits	N/Av.
Odour	Solvent	Flash point	0°C (32°F)
Odour threshold	N/Av.	Auto-ignition temperature	170°C (338°F)
pH	N/Av.	Sensibility to electrostatic charges	Yes
Melting point	N/Av.	Sensibility to sparks and/or friction	No
Freezing point	N/Av.	Vapour density	>1 (Air = 1)
Boiling point	56 to 126°C (132.8 to 258.8°F)	Relative density	1.127 kg/L (Water = 1)
Solubility	Partially soluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	> Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	N/Av.	Viscosity	N/Av.
Percent Volatile	50.6%	Molecular mass	N/Av.

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid heat, flame and sparks. Avoid contact with incompatible materials.
Incompatible materials	Strong bases, mineral acids, strong oxidizing agents (such as nitric acid, perchloric acid, peroxides, chlorates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Butyl acetate (normal)	Ingestion 10768 mg/kg	Rat	LD50
		Inhalation >32.5 mg/l/4h	Rat	LC50
		Skin >17600 mg/kg	Rabbit	LD50
	Titanium dioxide	Ingestion >10000 mg/kg	Rat	LD50
		Inhalation >6.82 mg/l/4h	Rat	LC50
		Skin >10000 mg/kg	Rabbit	LD50
	n-Propanol	Ingestion 1870 mg/kg	Rat	LD50
		5467 mg/kg	Mouse	LD50
		Inhalation 48 mg/l/4h	Mouse	LC50
		Skin 4060 mg/kg	Rabbit	LD50
	Nitrocellulose	Ingestion >5000 mg/kg	Rat	LD50
	Acetone	Ingestion 5800 mg/kg	Rat	LD50
		Inhalation 71.4 mg/l/4h	Rat	LC50
		Skin 15800 mg/kg	Rabbit	LD50
	Propylene glycol monomethyl ether acetate	Ingestion 8532 mg/kg	Rat	LD50
		Inhalation 28.7 mg/l/4h	Rat	LC50
		Skin >5000 mg/kg	Rabbit	LD50
	Bis(2-Ethylhexyl) adipate	Ingestion 9100 mg/kg	Rat	LD50
		Inhalation >5.7 mg/l/4h	Rat	LC50
		Skin 17297 mg/kg	Rabbit	LD50
	Isopropyl alcohol	Ingestion 5045 mg/kg	Rat	LD50
		Inhalation 66.1 mg/l/4h	Rat	LC50
		Skin 6280 mg/kg	Rat	LD50
	n-Butyl Alcohol	Ingestion 790 mg/kg	Rat	LD50
	Inhalation 24.2 mg/l/4h	Rat	LC50	
	Skin 3400 mg/kg	Rabbit	LD50	
Isobutyl alcohol	Ingestion 2460 mg/kg	Rat	LD50	
	Inhalation 19.2 mg/l/4h	Rat	LC50	
	Skin 3400 mg/kg	Rabbit	LD50	
Xylene	Ingestion 3523 mg/kg	Rat	LD50	
	Inhalation 27.6 mg/l/4h	Rat	LC50	
	Skin 3200 mg/kg	Rabbit	LD50	
Ethylbenzene	Ingestion 3500 mg/kg	Rat	LD50	
	Inhalation 17.3 mg/l/4h	Rat	LC50	
	Skin 15380 mg/kg	Rabbit	LD50	

Likely routes of exposure	Skin, eyes, inhalation, ingestion.
Delayed, immediate and chronic effects	<p>Eye contact May cause severe eye irritation or eye damage. The single application of n-propanol (0.1 ml) causes severe conjunctivitis, with attack of the iris, corneal opacity and ulceration. Causes severe irritation reversible within 21 days (OECD 405). Butyl Alcohol instilled in rabbit eyes resulted in severe corneal irritation and eye damage (OECD 405). Application in excess of 5% dilution solution gave irritating effect. Isobutyl alcohol is a severe eye irritant in rabbits (OECD 405). Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with the other ingredients of this mixture gave not irritating to irritating results.</p> <p>Skin contact May cause redness, dryness, rash and skin irritation. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient of this mixture gave not irritating to irritating results.</p> <p>Inhalation Excessive inhalation is harmful. May cause respiratory tract irritation. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue. The severity of symptoms may vary depending on exposure conditions. Repeated and prolonged occupational overexposure to solvents may cause brain and nervous system damage.</p> <p>Ingestion Swallowing will causes digestive tract disturbances resulting in nausea, vomiting, cramps and diarrhea. Ingestion of large amounts may cause depression of the central nervous system characterized by headache, dizziness, convulsions and loss of consciousness.</p> <p>Respiratory or skin sensitization Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.</p> <p>IARC/NTP Classification Common name IARC NTP Titanium dioxide 2B - Ethylbenzene 2B - IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.</p> <p>Carcinogenicity Contains substances that can cause cancer based on animal data. The risk of cancer depends on duration and level of exposure. Titanium dioxide in dust form can cause cancer based on animal data. Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint and caulk.</p> <p>Mutagenicity Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.</p> <p>Reproductive toxicity Xylene overexposure may affect fetal development in laboratory animals by inhalation during pregnancy. Isopropyl alcohol does not show specific reproductive or developmental toxicity. Any reproductive and developmental effects were only observed secondary to maternal toxicity. However, reproductive toxicity, such as decline in a pregnancy rate, an increase in embryo absorption, and an increase in fetus death, were observed at the dose in which a fall of the increasing weight, and toxicity such as an anesthesia action to parental animals were observed.</p> <p>Specific target organ toxicity - single exposure Central nervous system, respiratory system.</p> <p>Specific target organ toxicity - repeated exposure No target organ is listed.</p>
Interactive effects	No information available for this product.
Other information	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 20 mg/L/4h. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

12. Ecological information

Ecological toxicity	<p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 >100 mg/L; 96 h (acetone)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 12600-12700 mg/L; 48 h (acetone)</p> <p>Fish - Fathead minnow, Pimephales promelas - fresh water LC50 9640 mg/L; 96 h (Isopropyl alcohol)</p> <p>Aquatic Invertebrate - Crustaceans, Daphnia Magna EC50 3644 mg/L; 48 h (Isopropyl alcohol)</p> <p>Plant - Lettuce seed germination, Lactuca Sativa EC50 2100 mg/L; 72 h (Isopropyl alcohol)</p> <p>Algae, Pseudokirchneriella subcapitata EC50 579 mg/L; 96h (Nitrocellulose)</p> <p>Fish - Pimephales promelas [static] LC50 1376 mg/L; 96 h (n-Butyl alcohol)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 1983 mg/L; 48 h (n-Butyl alcohol)</p> <p>Algae - Desmodesmus subspicatus EC50 >500 mg/L; 72 h (n-Butyl alcohol)</p> <p>Fish - Lepomis macrochirus [static] LC50 0.48-0.85 mg/L; 96 h (CAS no 103-23-1)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 >1.6 mg/L; 48 h (CAS no 103-23-1)</p> <p>Algae - Desmodesmus subspicatus EC50 >500 mg/L; 72 h (CAS no 103-23-1)</p> <p>Fish - Pimephales promelas [flow-through] LC50 18 mg/L; 96h (Butyl acetate)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 44 mg/L; 48 h (n-Butyl acetate)</p> <p>Aquatic Plant - Algae, Desmodesmus subspicatus EC50 675 mg/L; 72h (Butyl acetate)</p> <p>Fish - Pimephales promelas - Fresh water LC50 1370-1670 mg/L; 96 h (Isobutyl alcohol)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 1300 mg/L; 48 h (Isobutyl alcohol)</p> <p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 13.5-17.3 mg/L; 96 h (Xylene)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 3.82 mg/L; 48 h (Xylene)</p> <p>Fish - Pimephales promelas [flow-through] LC50 4480 mg/L; 96 h (n-Propanol)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 3642 mg/L; 48 h (n-Propanol)</p> <p>Fish - Pimephales promelas [static] LC50 161 mg/L; 96 h (CAS no 108-65-6)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 >500 mg/L; 48 h (CAS no 108-65-6)</p>
Persistence	<p>Contains an or many ingredients that may be persistent in aquatic environment.</p>
Degradability	<p>N-Butyl acetate is readily biodegradable (96% in 28 days) OECD Guideline 301D. The term biodegradability, as such, is not applicable to inorganic compounds like Titanium dioxide. N-Propanol is readily biodegradable, 75% in 20 days (OECD 301F). Degradation of Nitrocellulose involves complex dissociation into a wide variety of products. Since it is not soluble in water, the biodegradation by a sludge-soil mixture will be done over a long period of time (TOXNET). Acetone is readily biodegradable at 91% in 28 days (OECD 301B). Propylene glycol monomethyl ether acetate is readily biodegradable (83% in 10 days) OECD Guideline 301 E. Isopropyl alcohol is biodegradable, 49% in 5 days and 70% in 20 days (TOXNET). It does not undergo photolysis. Its atmospheric degradation (OH radical attack) in air has a half-time $T_{1/2}$ of 18 to 25 hours. Bis(2-Ethylhexyl) adipate is readily biodegradable >90% in 28 days (OECD Guideline 301F). n-Butyl Alcohol is readily biodegradable. Degradation by Biochemical Oxygen Demand BOD (O₂ consumption) was reported as 92% after 20 days. Isobutyl alcohol is readily biodegradable, 74% in 28 days (OCDE 301D). Xylene in air is rapidly decomposed by photochemical processes, mainly through oxidation by hydroxyle free radicals as well as some decomposition by direct photolysis. The half-life time in air is estimated to be from 9.5 to 19.7 hours depending to the isomer. Xylene is readily biodegradable at 68% in 10 days and at 88% in 28 days (OECD Guideline 301F) with BOD₅/COD ratio of 0.97 (IUCLID).</p>
Bioaccumulative potential	<p>N-Butyl acetate has a low potential for bioaccumulation based on estimated bioconcentration factors (BCF) of 15.3 and low partition coefficient (Log Kow 2.3). The Log Kow values <0.4 and bioconcentration factor (BCF) values <1 for n-propanol show no potential to bioaccumulate (IUCLID). Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factor Log Kow of -0.24, indicating no bioaccumulation. Propylene glycol monomethyl ether acetate is not expected to bioaccumulate based on a low partition coefficient (Log Kow 0.36). The Log Kow value <0.4 and bioconcentration factor (BCF) value <1 for isopropyl alcohol show no potential to bioaccumulate (IUCLID). Bis(2-Ethylhexyl) adipate has a Bioconcentration Factor (BCF) of 27, indicating no bioaccumulation. n-Butyl alcohol has a Bioconcentration Factor (BCF) value of 3, and its Log Kow value is from 0.8 to 1, indicating its potential to bioaccumulate is very low. Isobutyl alcohol has a low potential to bioaccumulate with a bioconcentration factor (BCF) of 3 (TOXNET). Xylene has Bioconcentration Factor (BCF) of of 6 to 23.4 and a partition factor Log Kow of 3.1 to 3.2, depending to the isomer. These values suggest a low potential of bioaccumulation (TOXNET).</p>
Mobility in soil	<p>N-Butyl acetate will be distributed to air (93.4%), water (5.78%), soil (0.792%), and sediment (<0.1%). The Koc value of n-butyl acetate can be estimated to be 19, suggesting that it is expected to have very high mobility in soil. n-propanol is soluble in water and will quickly evaporate into the air. There is no partition in</p>

the ground. Acetone evaporates very rapidly from dry soil surfaces. It is very soluble in water and it is expected to have very high mobility in soil with no adsorption to sediment. Propylene glycol monomethyl ether acetate is soluble in water and should have a high mobility in soil. It will be distributed to air (10.22%), water (89.73%), soil (0.03%), and sediment (0.02%). Isopropyl alcohol is soluble in water and will quickly evaporate into the air. There is no partition in the ground. Bis(2-Ethylhexyl) adipate has an estimated Koc value of 49000 which suggests that it is expected to be immobile in soil. n-Butyl alcohol is soluble in water. The estimated Koc value of 3.2 suggests that it is expected to have very high mobility in soil. Isobutyl alcohol should have a very high mobility in soil with an estimated Koc value of 2.9 (TOXNET) and it distributes itself into the atmosphere (32.02%), water (67.92%), soil (0.03%), and sediments (0.03%). Xylene will rapidly evaporate into the atmosphere because of its low soil absorption and its low solubility in water. Koc values range from 39-365 for the individual isomers. These values suggest that xylenes are expected to have high to moderate mobility in soil (TOXNET).

Other adverse effects

This chemical does not deplete the ozone layer.


13. Disposal considerations

Container



Important! Prevent waste generation. Use in full. DO NOT dispose of residue in sewers, streams or drinking water supply. DO NOT puncture, cut, heat or burn container, even after use. Paint residues, including lacquers, stains, shellac, varnish, solvents and paint thinners, can be reprocessed (recycle) anywhere there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN 1263
UN Proper Shipping Name	PAINT
Environmental hazards	This material does not contain marine pollutant.
Special precautions for user	Permit required for transportation with proper placards displayed on vehicle.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	 Class 3
Packing group	II
IMO/IMDG - International Maritime Transport	
Classification	UN 1263. PAINT. Class 3, PG II. Emergency schedules (EmS-No) F-E, S-E
IATA - International Air Transport Association	
Classification	UN 1263. PAINT. Class 3, PG II.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Butyl acetate (normal)	123-86-4	X	X		X
Titanium dioxide	13463-67-7		X		
n-Propanol	71-23-8		X		X
Nitrocellulose	9004-70-0		X		
Acetone	67-64-1		X		
Propylene glycol monomethyl ether acetate	108-65-6	X	X		X
Isopropyl alcohol	67-63-0	X	X		X
Bis(2-Ethylhexyl) adipate	103-23-1		X		X
n-Butyl Alcohol	71-36-3	X	X		X
Xylene	1330-20-7	X	X		X
Isobutyl alcohol	78-83-1	X	X		X
Ethylbenzene	100-41-4	X	X		X

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CERCLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Priority
Butyl acetate (normal)	123-86-4	X	X						X	
Titanium dioxide	13463-67-7	X								
n-Propanol	71-23-8	X							X	
Nitrocellulose	9004-70-0	X								
Acetone	67-64-1	X	X			X				
Propylene glycol monomethyl ether acetate	108-65-6	X								
Isopropyl alcohol	67-63-0	X		X					X	
Bis(2-Ethylhexyl) adipate	103-23-1	X								
n-Butyl Alcohol	71-36-3	X	X	X					X	
Xylene	1330-20-7	X	X	X		X	X		X	
Isobutyl alcohol	78-83-1	X	X							
Ethylbenzene	100-41-4	X	X	X		X	X		X	X

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

Common name	CAS	Cancer	Reproductive and Developmental Toxicity
Titanium dioxide	13463-67-7	X	
Ethylbenzene	100-41-4	X	

Other regulations**WHMIS 1988**

B2 D2A D2B

Class B2 : Flammable Liquid

Class D2A : Very toxic material causing other toxic effects

Class D2B : Toxic material causing other toxic effects

HMIS**NFPA****16. Other information****Date
(YYYY-MM-DD)**

GEMINI INDUSTRIES, INC. 2016-04-05

Version

01

**Other
information**

- This SDS and the GHS hazards classification is a French translation of the original English version (SDS) from the manufacturer.

REFERENCES:

- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, <http://hazmap.nlm.nih.gov/index.php>
- TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, <http://toxnet.nlm.nih.gov/>
- Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), <http://www.reptox.csst.qc.ca>
- NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, <http://www.cdc.gov/niosh/npg/npg.html>
- IPCS INCHEM, Chemical Safety Information from Intergovernmental Organizations, Canadian Centre for Occupational Health and Safety (CCOHS), Copyright International Programme on Chemical Safety (IPCS), <http://www.inchem.org>
- OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, UNEP publications, <http://webnet.oecd.org/HPV/UI/Search.aspx>

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

HMIS: Hazardous Materials Identification System

NFPA: National Fire Protection Association

OSHA: Occupational Safety and Health Administration (USA)

NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

RSST: Règlement sur la santé et la sécurité du travail (Québec)

GHS: Globally Harmonized System

IARC: International Agency for Research on Cancer

IDLH: Immediately Dangerous to Life or Health

STEL: Short Term Exposure Limit (15 min)

TWA: Time Weighted Averages

WHMIS: Workplace Hazardous Materials Information System

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.