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Safety Data Sheet
550 VOC PRECAT LACQUER SEMI-GLOSS, WHITE

1. Identification

Product identifier	550 VOC PRECAT LACQUER SEMI-GLOSS, WHITE
Product code	410-0034
Other means of identification	None.
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
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	FLAMABLE LIQUID! 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.

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)

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
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 in a well-ventilated area.
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**
Acetone	67-64-1	28 - 30 %
Titanium dioxide	13463-67-7	15 - 17 %
Methyl n-amyl ketone	110-43-0	8 - 10 %
Nitrocellulose	9004-70-0	6.5 - 7.5 %
n-Butyl Alcohol	71-36-3	5.5 - 6.5 %
Urea, polymer with formaldehyde, isobutylated	68002-18-6	4.5 - 5.5 %
Butyl acetate (normal)	123-86-4	3.5 - 4.5 %
Isopropyl alcohol	67-63-0	2.5 - 3.5 %
Bis(2-Ethylhexyl) adipate	103-23-1	2.5 - 3.5 %
Ethylene glycol monopropyl ether	2807-30-9	2.5 - 3.5 %
2-Butoxyethanol	111-76-2	1.5 - 2.5 %
Isobutyl alcohol	78-83-1	1.5 - 2.5 %
Xylene	1330-20-7	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.
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 (CO2). 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 transfering large quantities (5 gallons US or 20 L and more). Use 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. Methyl n-amyl ketone: 800 ppm. Isopropyl alcohol: 2000 ppm. n-Butyl Alcohol: 1400 ppm. n-Butyl acetate: 1700 ppm. 2-Butoxyethanol: 700 ppm. Isobutyl alcohol: 1600 ppm. Xylenes: 900 ppm. Ethylbenzene: 800 ppm.

Acetone	STEL		500 ppm		ACGIH , BC
			750 ppm	1782 mg/m^3	ON
			1000 ppm	2380 mg/m^3	RSST
	TWA (8h)		250 ppm		ACGIH , BC
			500 ppm	1188 mg/m^3	ON
			500 ppm	1190 mg/m^3	RSST
Titanium dioxide	TWA (8h)	Total Dust		10 mg/m^3	ACGIH , BC, ON, RSST
Methyl n-amyl ketone	TWA (8h)		25 ppm	115 mg/m^3	ON
			50 ppm		ACGIH , BC
			50 ppm	233 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
Butyl acetate (normal)	STEL		200 ppm		ACGIH , ON
			200 ppm	950 mg/m^3	RSST
	TWA (8h)		20 ppm		BC
			150 ppm		ACGIH , ON
			150 ppm	713 mg/m^3	RSST
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
2-Butoxyethanol	TWA (8h)		20 ppm		ACGIH , BC, ON
			20 ppm	97 mg/m^3	RSST
Isobutyl alcohol	TWA (8h)		50 ppm		ACGIH , BC, ON
			50 ppm	152 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
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 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/Ap.	**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 151°C (132.8 to 303.8°F)	**Relative density**	1.03 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	60.33%	**Molecular mass**	N/Ap.

N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established

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 electro-static discharge. 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

Acetone	Ingestion	5800 mg/kg	Rat	LD50
	Inhalation	71.4 mg/l/4h	Rat	LC50
	Skin	15800 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
Methyl n-amyl ketone	Ingestion	1670 mg/kg	Rat	LD50
	Inhalation	<18.7 mg/l/4h	Rat	LC50
		>9.34 mg/l/4h	Rat	LC50
	Skin	10220 mg/kg	Rabbit	LD50
Nitrocellulose	Ingestion	>5000 mg/kg	Rat	LD50
n-Butyl Alcohol	Ingestion	2510 mg/kg	Rat	LD50
	Inhalation	24.2 mg/l/4h	Rat	LC50
	Skin	3400 mg/kg	Rabbit	LD50
Urea, polymer with formaldehyde, isobutylated	Ingestion	>5000 mg/kg	Rat	LD50
	Skin	>5000 mg/kg	Rabbit	LD50
Butyl acetate (normal)	Ingestion	10768 mg/kg	Rat	LD50
	Inhalation	>32.5 mg/l/4h	Rat	LC50
	Skin	>17600 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
Ethylene glycol monopropyl ether	Ingestion	3089 mg/kg	Rat	LD50
	Inhalation	>11.13 mg/l/4h	Rat	LC50
	Skin	883 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
2-Butoxyethanol	Ingestion	560 mg/kg	Rat	LD50
	Inhalation	2.21 mg/l/4h	Rat	LC50
	Skin	220 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	**Eye contact**	May cause severe eye irritation or eye damage. 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.
	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.
	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.
	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.
	Respiratory or skin sensitization	Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.
	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.
	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.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	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. The inhalation of high concentration of 2-Butoxyethanol has an embryotoxic and/or foetotoxic effect on rats and rabbits at doses which were severely toxic to the animals
	Specific target organ toxicity - single exposure	Central nervous system, respiratory system.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
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 but lower than 5000 mg/Kg. These values are classified category 5 by the GHS. 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	Fish - Oncorhynchus mykiss - Rainbow trout	LC50	>100 mg/L; 96 h (acetone)
	Aquatic Invertebrate - Daphnia magna	EC50	12600-12700 mg/L; 48 h (acetone)
	Fish - Fathead minnow, Pimephales promelas - fresh water	LC50	9640 mg/L; 96 h (Isopropyl alcohol)
	Aquatic Invertebrate - Crustaceans, Daphnia Magna	EC50	3644 mg/L; 48 h (Isopropyl alcohol)
	Plant - Lettuce seed germination, Lactuca Sativa	EC50	2100 mg/L; 72 h (Isopropyl alcohol)
	Algea, Pseudokirchneriella subcapitata	EC50	579 mg/L; 96h (Nitrocellulose)
	Fish - Pimephales promelas [flow-through]	LC50	126-137 mg/L; 96 h (Methyl n-amyl ketone)
	Fish - Pimephales promelas [static]	LC50	1376 mg/L; 96 h (n-Butyl alcohol)
	Aquatic Invertebrate - Daphnia magna	EC50	1983 mg/L; 48 h (n-Butyl alcohol)
	Algea - Desmodesmus subspicatus	EC50	>500 mg/L; 72 h (n-Butyl alcohol)
	Fish - Lepomis macrochirus [static]	LC50	0.48-0.85 mg/L; 96 h (CAS no 103-23-1)
	Aquatic Invertebrate - Daphnia magna	EC50	>1.6 mg/L; 48 h (CAS no 103-23-1)
	Algea - Desmodesmus subspicatus	EC50	>500 mg/L; 72 h (CAS no 103-23-1)
	Fish - Pimephales promelas [flow-through]	LC50	18 mg/L; 96h (Butyl acetate)
	Aquatic Invertebrate - Daphnia magna	EC50	44 mg/L; 48 h (n-Butyl acetate)
	Aquatic Plant - Algea, Desmodesmus subspicatus	EC50	675 mg/L; 72h (Butyl acetate)
	Fish various	LC50	>160 mg/L ; 96h (2-Butoxyethanol)
	Crustaceans various	EC50	>130 mg/L ; 96h (2-Butoxyethanol)
	Fish - Pimephales promelas - Fresh water	LC50	1370-1670 mg/L; 96 h (Isobutyl alcohol)
	Aquatic Invertebrate - Daphnia magna	EC50	1300 mg/L; 48 h (Isobutyl alcohol)
	Fish - Oncorhynchus mykiss - Rainbow trout	LC50	13.5-17.3 mg/L; 96 h (Xylene)
	Aquatic Invertebrate - Daphnia magna	EC50	3.82 mg/L; 48 h (Xylene)
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.		
Degradability	Acetone is readily biodegradable at 91% in 28 days (OECD 301B). The term biodegradability, as such, is not applicable to inorganic compounds like Titanium dioxide. Methyl n-amyl ketone is readily biodegradable at 69% after 28 days (OECD Guideline 310). 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). n-Butyl Alcohol is readily biodegradable. Degradation by Biochemical Oxygen Demand BOD (O2 consumption) was reported as 92% after 20 days. 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 T½ of 18 to 25 hours. Bis(2-Ethylhexyl) adipate is readily biodegradable >90% in 28 days (OECD Guideline 301F). n-Butyl acetate is readily biodegradable (96% in 28 days) OECD Guideline 301D. 2-Butoxyethanol is readily biodegradable 90.4% in 28 days (OECD Guideline 301B). 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).		
Bioaccumulative potential	Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factor Log Kow of -0.24, indicating no bioaccumulation. Methyl n-amyl ketone has an estimated a Bioconcentration Factor (BCF) of 7 and partition coefficient log Kow of 1.98 which suggest a low potential for bioconcentration in aquatic organisms (TOXNET). 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. 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 acetate has a low potential for bioaccumulation based on estimated bioconcentration factors (BCF) of 15.3 and low partition coefficient (Log Kow 2.3). 2-Butoxyethanol is not expected to bioaccumulate based on a low partition coefficient (Log Kow <2). 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).		
Mobility in soil			

	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. Methyl n-amyl ketone can be volatilized from moist soil surfaces (SRC). The estimated Koc value of 280 indicates that it is expected to have high mobility 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. 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 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. The estimated Koc value of 0.83 suggests that 2-Butoxyethanol is expected to have high mobility in soil (TOXNET). 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
Acetone	67-64-1		X		
Titanium dioxide	13463-67-7		X		
Methyl n-amyl ketone	110-43-0		X		
Nitrocellulose	9004-70-0		X		
n-Butyl Alcohol	71-36-3	X	X		X
Urea, polymer with formaldehyde, isobutylated	68002-18-6		X		
Butyl acetate (normal)	123-86-4	X	X		X
Isopropyl alcohol	67-63-0	X	X		X
Bis(2-Ethylhexyl) adipate	103-23-1		X		X
Ethylene glycol monopropyl ether	2807-30-9		X		
2-Butoxyethanol	111-76-2	X	X		X
Isobutyl alcohol	78-83-1	X	X		X
Xylene	1330-20-7	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
Acetone	67-64-1	X	X			X				
Titanium dioxide	13463-67-7	X								
Methyl n-amyl ketone	110-43-0	X								
Nitrocellulose	9004-70-0	X								
n-Butyl Alcohol	71-36-3	X	X	X					X	
Urea, polymer with formaldehyde, isobutylated	68002-18-6	X								
Butyl acetate (normal)	123-86-4	X	X						X	
Isopropyl alcohol	67-63-0	X		X					X	
Bis(2-Ethylhexyl) adipate	103-23-1	X								
Ethylene glycol monopropyl ether	2807-30-9	X				X				
2-Butoxyethanol	111-76-2	X								
Isobutyl alcohol	78-83-1	X	X							
Xylene	1330-20-7	X	X	X		X	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 D1A D2A D2B

Class B2 : Flammable Liquid
Class D1A : Very toxic material causing immediate and serious toxic effects
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. 2016-03-22
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 To the best of our knowledge, the information contained herein is accurate. However, neither Préventis System 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.