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Safety Data Sheet
NEXUS PRECAT LACQUER, DULL

1. Identification

Product identifier	NEXUS PRECAT LACQUER, DULL		
Product code	PC-0420		
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.gemini-coatings.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	Flammable 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)
Germ cell mutagenicity (Category 1B)
Carcinogenicity (Category 1B)
Reproductive toxicity (Category 1)
Specific target organ toxicity, single exposure (Category 3)

DANGER
H225: Highly flammable liquid and vapour
H318: Causes serious eye damage
H350: May cause cancer
H340: May cause genetic defects
H360: May damage fertility or the unborn child
H315: Causes skin irritation
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
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.
P233: Keep container tightly closed.
P240: Ground or bond container and receiving equipment.
P241: Use explosion-proof electrical equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing vapours and spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing and eye protection.
P308+313: IF exposed or concerned: Get medical attention.
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 POISON CENTER or a doctor.
P362+364: Take off contaminated clothing and wash before reuse.
P370+378: In case of fire: Use ABC dry chemical to extinguish.
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	36 - 38 %
Acetone	67-64-1	9 - 11 %
Ethyl alcohol	64-17-5	9 - 11 %
Nitrocellulose	9004-70-0	7 - 9 %
n-Butyl Alcohol	71-36-3	5 - 7 %
Urea, polymer with formaldehyde, isobutylated	68002-18-6	5 - 7 %
Isopropyl alcohol	67-63-0	3.5 - 4.5 %
Bis(2-Ethylhexyl) adipate	103-23-1	2.5 - 3.5 %
Isobutyl alcohol	78-83-1	1.5 - 2.5 %
Xylene	1330-20-7	1.5 - 2.5 %
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	0.1 - 1 %
Ethylbenzene	100-41-4	0.1 - 1 %
1,2,4-Trimethylbenzene	95-63-6	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 if easy to do. Hold eyelids apart to rinse properly. Seek medical attention immediately.
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 plenty of water. 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, rash and skin irritation. May cause respiratory tract irritation. 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 gastric 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	Dried powder, chemical foam, carbon dioxide (CO2), ABC fire extinguishing. Do not use a heavy water jet.
Specific hazards arising from the chemical	Highly flammable liquid and vapour. May be ignited by heat, sparks, flame or static electricity. Vapours are heavier than air and may travel to an ignition source distant from the material handling point. Do not apply to hot surfaces.
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.

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. Use only in well ventilated area. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. 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. 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	Ethyl alcohol: 3300 ppm. n-Butyl acetate: 1700 ppm. n-Butyl Alcohol: 1400 ppm. Acetone: 2500 ppm. Isopropyl alcohol: 2000 ppm. Isobutyl alcohol: 1600 ppm. Xylenes: 900 ppm. Ethylbenzene: 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
		150 ppm	713 mg/m^3	RSST
Acetone	STEL	500 ppm		ACGIH , BC, ON
		1000 ppm	2380 mg/m^3	RSST
	TWA (8h)	250 ppm		ACGIH , BC, ON
		500 ppm	1190 mg/m^3	RSST
Ethyl alcohol	STEL	1000 ppm		ACGIH , BC, ON
	TWA (8h)	1000 ppm	1880 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
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
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
1,2,4-Trimethylbenzene	TWA (8h)	25 ppm		ACGIH , BC, ON
		25 ppm	123 mg/m^3	RSST

Appropriate engineering controls	Provide sufficient mechanical ventilation (general 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. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) 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	Clear or coloured	**Flammability limits**	N/Av.
Odour	Solvent odor	**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 214°C (132.8 to 417.2°F)	**Relative density**	0.927 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	71.94%	**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 oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates), strong bases (e.g. hydroxides, solutions of ammonia, amines, carbonates), strong acids (e.g. hydrochloric acid, sulfuric acid, phosphoric acid).
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
	Acetone	Ingestion	5800 mg/kg	Rat	LD50
		Inhalation	71.4 mg/l/4h	Rat	LC50
		Skin	15800 mg/kg	Rabbit	LD50
	Ethyl alcohol	Ingestion	7060 mg/kg	Rat	LD50
		Inhalation	39 mg/l/4h	Mouse	LC50
		Skin	20000 mg/kg	Rabbit	LD50
	Nitrocellulose	Ingestion	>5000 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
	Urea, polymer with formaldehyde, isobutylated	Ingestion	>5000 mg/kg	Rat	LD50
		Skin	>5000 mg/kg	Rabbit	LD50
	Isopropyl alcohol	Ingestion	3600 mg/kg	Mouse	LD50
			5045 mg/kg	Rat	LD50
		Inhalation	66.1 mg/l/4h	Rat	LC50
		Skin	6280 mg/kg	Rat	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
	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
	1,2,4-Trimethylbenzene	Ingestion	5000 mg/kg	Rat	LD50
		Inhalation	18 mg/l/4h	Rat	LC50
		Skin	>3160 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
	Solvent naphtha (petroleum), light aromatic (C8 to C10)	Ingestion	8400 mg/kg	Rat	LD50
		Inhalation	>5.2 mg/l/4h	Rat	LC50
		Skin	>3750 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. Many reports with painters have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.
	Ingestion	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** Ethylbenzene 2B - IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.
	Carcinogenicity	There is sufficient evidence in humans for the carcinogenicity of occupational exposure as a painter (IARC Group 1). Occupational exposure as a painter causes mesothelioma, and cancers of the urinary bladder and lung (IARC Monographs, Volume 100F (2012)). In the absence of specific test data, the classification of the mixture solvent naphtha (petroleum), light aromatic (C8-C10) (CAS No. 64742-95-6) should be determined based on the levels of benzene (CAS no. 71-43-2). This classification need not apply if it can be shown that the chemical contains less than 0.1 % w/w benzene. There is sufficient evidence for the carcinogenicity of alcoholic (Ethanol) beverages in humans (IARC). The occurrence of malignant tumors of the oral cavity, pharynx, larynx, oesophagus, liver, breast and colorectal is causally related to the excessive consumption of alcoholic beverages.
	Mutagenicity	In the absence of specific test data, the classification of the mixture solvent naphtha (petroleum), light aromatic (C8-C10) (CAS No. 64742-95-6) should be determined based on the levels of benzene (CAS no. 71-43-2). This classification need not apply if it can be shown that the chemical contains less than 0.1 % w/w benzene. Ethyl Alcohol has showed positive results in dominant lethal tests by oral and intraperitoneal administration to mice and oral administration to rats (in vivo heritable germ cell mutagenicity tests) (SIDS (2009), IARC (1988)). There are also reports of negative Ames tests from in vitro mutagenicity tests SIDS (2009).
	Reproductive toxicity	Major malformations have been reported in infants born of women who had been working with solvent-based paints (oil-based paints) during pregnancy. Therefore, long-term exposure to solvent-based paints that may occur in occupational life can affect a developing baby (American Journal of Industrial Medicine, 1980). A significant and prolonged consumption of ethyl alcohol during pregnancy can cause an increased risk of developmental abnormalities fetus humans. Xylene overexposure may affect fetal development in laboratory animals by inhalation during pregnancy.
	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 acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 20 mg/L/4h. This value is not classified according to GHS. The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. These values are not classified according to WHMIS 2015	

	and OSHA HCS 2012.

12. Ecological information

Ecological toxicity	Fish - Pimephales promelas [flow-through] LC50 18 mg/L; 96h (Butyl acetate) Algea, Desmodesmus subspicatus EC50 675 mg/L; 72h (Butyl acetate) 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) Aquatic Invertebrate - Daphnia magna EC50 1983 mg/L; 48h (n-Butyl Alcohol) OEDC 202 Fish - Pimephales promelas [static] LC50 376 mg/L; 96h (n-Butyl Alcohol) OEDC 203 Algea - Desmodesmus subspicatus EC50 >500mg/L; 72h (n-Butyl Alcohol) Fish - Oncorhynchus mykiss - Rainbow trout LC50 4740 mg/L; 96 h (acetone) Aquatic Invertebrate - Daphnia magna EC50 12600-12700 mg/L; 48 h (acetone) Fish - Pimephales promelas [flow-through] LC50 13400-15100 mg/L; 96 h (ethyl alcohol) Aquatic Invertebrate - Daphnia magna EC50 9268-14221 mg/L; 48 h (ethyl alcohol) Algea, Pseudokirchneriella subcapitata EC50 579 mg/L; 96h (Nitrocellulose) 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) Fish - Oryzias latipes LC50 >100 mg/L; 96h (Bis(2-Ethylhexyl) adipate) OECD 203 Aquatic Invertebrate - Daphnia magna EC50 >500 mg/L; 48h (Bis(2-Ethylhexyl) adipate) OECD 202
Persistence	May be persistent in the environment.
Degradability	N-Butyl acetate is readily biodegradable (96% in 28 days) OECD Guideline 301D. n-Butyl Alcohol is readily biodegradable. Degradation by Biochemical Oxygen Demand BOD (O2 consumption) was reported as 92% after 20 days. Ethanol is readily biodegradable under aerobic and anaerobic conditions (OECD Test Guideline 301D). 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). 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). 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	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). Ethanol has a Bioconcentration Factor (BCF) value of <10, and its Log Kow value is <0, indicating its potential to bioaccumulate is low. 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. Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factor Log Kow of -0.24, indicating no bioaccumulation. 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. 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	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-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. Ethanol is very soluble in water. The resultant Koc of 1 indicates that ethanol released in soil would move quickly through the soil. It will be distributed mainly in the atmosphere (57%) and water (34%). 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. 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. 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 residue in sewers, streams or drinking water supply. DO NOT puncture or burn even after use. Paint residues including lacquer, thinner, stain, shellac, varnish, polish can be reprocessed everywhere there is a recycling 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 DANGER 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
Acetone	67-64-1		X		
Ethyl alcohol	64-17-5	X	X		X
Nitrocellulose	9004-70-0		X		
n-Butyl Alcohol	71-36-3	X	X		X
Urea, polymer with formaldehyde, isobutylated	68002-18-6		X		
Isopropyl alcohol	67-63-0	X	X		X
Bis(2-Ethylhexyl) adipate	103-23-1		X		X
Isobutyl alcohol	78-83-1	X	X		X
Xylene	1330-20-7	X	X		X
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	X	X		X
Ethylbenzene	100-41-4	X	X		X
1,2,4-Trimethylbenzene	95-63-6	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	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Butyl acetate (normal)	123-86-4	X	X						X	
Acetone	67-64-1	X	X			X				
Ethyl alcohol	64-17-5	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								
Isopropyl alcohol	67-63-0	X		X					X	
Bis(2-Ethylhexyl) adipate	103-23-1	X								
Isobutyl alcohol	78-83-1	X	X							
Xylene	1330-20-7	X	X	X		X	X		X	
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	X								
Ethylbenzene	100-41-4	X	X	X		X	X		X	X
1,2,4-Trimethylbenzene	95-63-6	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
Ethyl alcohol	64-17-5	X	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. 2017-03-20
Version	01
Other information	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 - OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, UNEP publications, http://webnet.oecd.org/HPV/UI/Search.aspx - The National Center for Biotechnology Information, National Institutes of Health (NIH), U.S. National Library of Medicine, www.ncbi.nlm.nih.gov 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 Prï¿½ventis 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.