



# Safety Data Sheet

## H.S. C.V. SEALER



### 1. Identification

<b>Product identifier</b>	H.S. C.V. SEALER		
<b>Product code</b>	250-0009		
<b>Other means of identification</b>	HIGH SOLIDS C.V. SEALER.		
<b>Recommended use of the chemical and restrictions on use</b>	A protective and/or decorative finish or accompanying paint product. Not recommended for any other use not detailed on product data sheet or label.		
<b>Manufacturer</b>	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA  Tel. 1-800-262-5710 Fax 1-405-262-9310 <a href="http://www.gemini-coatings.com">www.gemini-coatings.com</a>		
<b>Emergency phone number</b>	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

<b>Summary</b>	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.
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#### WHMIS 2015/OSHA HCS 2012/GHS

Flammable liquids (Category 2)  
 Skin corrosion/irritation (Category 2)  
 Serious eye damage (Category 1)  
 Germ cell mutagenicity (Category 1B)  
 Carcinogenicity (Category 1)  
 Reproductive toxicity (Category 1)  
 Specific target organ toxicity, single exposure (Category 3)  
 Specific target organ toxicity, repeated exposure (Category 2)  
 Aspiration hazard (Category 1)



**Other hazards which do not result in classification :**  
 Acute hazard to the aquatic environment (Category 2).  
 Long-term hazard to the aquatic environment (Category 2)

#### 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  
H304: May be fatal if swallowed and enters airways  
H315: Causes skin irritation  
H335: May cause respiratory irritation  
H336: May cause drowsiness or dizziness  
H373: May cause damage to organs through prolonged or repeated exposure by inhalation  
H411: Toxic to aquatic life with long lasting effects  
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.  
P260: Do not breathe mist, vapours 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.  
P308+313: IF exposed or concerned: Get medical attention.  
P314: Get Medical advice/attention if you feel unwell.  
P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.  
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.  
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.  
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 chemical foam, dry chemical or carbon dioxide to extinguish.  
P391: Collect spillage.  
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
Ethyl alcohol	64-17-5	16 - 18 %
Butyl acetate (normal)	123-86-4	10 - 12 %
Distillates (petroleum), light distillate hydrotreating process, low-boiling	68410-97-9	9 - 11 %
Acetone	67-64-1	8 - 10 %
Toluene	108-88-3	7.5 - 8.5 %
Isobutyl alcohol	78-83-1	4.5 - 5.5 %
Synthetic Amorphous Fumed Silica	112945-52-5	1 - 2 %
n-Butyl Alcohol	71-36-3	1 - 2 %
n-Propyl acetate	109-60-4	1 - 2 %
N,N'-Ethylene distearamide	110-30-5	1 - 2 %
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	0.1 - 1 %

## 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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 small amounts 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.
<b>Other</b>	No information available.
<b>Symptoms</b>	May cause severe eye irritation or eye damage. May cause 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. Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.
<b>Notes to the physician</b>	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

<b>Suitable extinguishing media</b>	Class B extinguishers. Dry chemicals, alcohol resistant foam, carbon dioxide (CO <sub>2</sub> ). Do not use a heavy water jet.
<b>Specific hazards arising from the chemical</b>	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. Contact with strong oxidizers may cause fire. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Special protective equipment</b>	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
<b>Special protective actions for fire-fighters</b>	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

<b>Personal precautions, protective equipment and emergency procedures</b>	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
<b>Environmental precautions</b>	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.
<b>Methods and materials for containment and cleaning up</b>	Remove sources of ignition. Ventilate the area well. Stop leak, if it's possible to do so without risk. 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

<b>Precautions for safe handling</b>	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 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. 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.
<b>Conditions for safe storage, including any incompatibilities</b>	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. Keep away from direct sunlight and heat. Store away from oxidizing materials and incompatible materials (see section 10).
<b>Storage temperature</b>	10 to 25°C (50 to 77°F)

## 8. Exposure controls/personal protection

<b>Immediately Dangerous to Life or Health</b>	Ethyl alcohol: 3300 ppm. n-Butyl acetate: 1700 ppm. Acetone: 2500 ppm. Toluene: 500 ppm Isobutyl alcohol: 1600 ppm. n-Butyl Alcohol: 1400 ppm. n-Propyl acetate: 1700 ppm. Synthetic Amorphous Fumed Silica: 3000 mg/m <sup>3</sup> .		
Ethyl alcohol	STEL	1000 ppm	ACGIH , BC, ON
	TWA (8h)	1000 ppm 1880 mg/m <sup>3</sup>	RSST
Butyl acetate (normal)	STEL	200 ppm	ACGIH , ON
	TWA (8h)	200 ppm 950 mg/m <sup>3</sup>	RSST
		20 ppm	BC
		150 ppm	ACGIH , ON
		150 ppm 713 mg/m <sup>3</sup>	RSST
Distillates (petroleum), light distillate hydrotreating process, low-boiling	TWA (8h)	Mist 5 mg/m <sup>3</sup>	ACGIH
Acetone	STEL	500 ppm	ACGIH , BC, ON
		1000 ppm 2380 mg/m <sup>3</sup>	RSST
	TWA (8h)	250 ppm	ACGIH , BC, ON
		500 ppm 1190 mg/m <sup>3</sup>	RSST
Toluene	TWA (8h)	20 ppm	ACGIH , BC, ON
		50 ppm 188 mg/m <sup>3</sup>	RSST (Pc)
Isobutyl alcohol	TWA (8h)	50 ppm	ACGIH , BC, ON

Synthetic Amorphous Fumed Silica	TWA (8h)	Respirable Dust	50 ppm	152 mg/m <sup>3</sup>	RSST
		Respirable Dust		1.5 mg/m <sup>3</sup>	BC
		Respirable Dust		3 mg/m <sup>3</sup>	ACGIH , ON
		Total Dust		4 mg/m <sup>3</sup>	BC
		Respirable Dust		6 mg/m <sup>3</sup>	RSST
n-Butyl Alcohol	Ceiling	Total Dust		10 mg/m <sup>3</sup>	ACGIH , ON
			30 ppm		BC
			50 ppm	152 mg/m <sup>3</sup>	RSST (Pc, RP)
N,N'-Ethylene distearamide	TWA (8h)	Respirable Dust		15 ppm	BC
		Total Dust	20 ppm		ACGIH , ON
				3 mg/m <sup>3</sup>	ACGIH
n-Propyl acetate	STEL	Total Dust		10 mg/m <sup>3</sup>	ACGIH
			250 ppm		ACGIH , BC, ON
			250 ppm	1040 mg/m <sup>3</sup>	RSST
	TWA (8h)		200 ppm		ACGIH , BC, ON
			200 ppm	835 mg/m <sup>3</sup>	RSST

<b>Appropriate engineering controls</b>	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.
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### Individual protection measures

<b>Eye</b>	Wear chemical splash goggles.
<b>Hands</b>	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.
<b>Skin</b>	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.
<b>Respiratory</b>	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.
<b>Feet</b>	Wear rubber boots to clean up a spill.

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid	<b>Flammability</b>	Flammable
<b>Colour</b>	Clear or coloured	<b>Flammability limits</b>	N/Av.
<b>Odour</b>	Solvent odor	<b>Flash point</b>	<0°C (32°F)
<b>Odour threshold</b>	N/Av.	<b>Auto-ignition temperature</b>	343°C (649.4°F)

<b>pH</b>	N/Ap.	<b>Sensibility to electrostatic charges</b>	Yes
<b>Melting point</b>	N/Av.	<b>Sensibility to sparks and/or friction</b>	No
<b>Freezing point</b>	N/Av.	<b>Vapour density</b>	>1 (Air = 1)
<b>Boiling point</b>	56 to 200°C (132.8 to 392°F)	<b>Relative density</b>	0.914 kg/L (Water = 1)
<b>Solubility</b>	Partially soluble in water.	<b>Partition coefficient n-octanol/water</b>	N/Av.
<b>Evaporation rate</b>	> Butyl Acetate	<b>Decomposition temperature</b>	N/Av.
<b>Vapour pressure</b>	N/Av.	<b>Viscosity</b>	<20.5 cSt @ 40°C (104°F)
<b>Percent Volatile</b>	64.56%	<b>Molecular mass</b>	N/Ap.

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

## 10. Stability and reactivity

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions (including polymerizations)</b>	A dangerous reaction will not occur.
<b>Conditions to avoid</b>	Avoid heat, flame and sparks. Avoid electro-static discharge. Avoid contact with incompatible materials.
<b>Incompatible materials</b>	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).
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

<b>Numerical measures of toxicity</b>	Ethyl alcohol	Ingestion	7060 mg/kg	Rat	LD50
		Inhalation	39 mg/l/4h	Mouse	LC50
		Skin	20000 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
	Distillates (petroleum), light distillate hydrotreating process, low-boiling	Ingestion	>2000 mg/kg	Rat	LD50
		Inhalation	>12408 ppm/4h	Rat	LC50
		Skin	>2000 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
	Toluene	Ingestion	5600 mg/kg	Rat	LD50
		Inhalation	30.2 mg/l/4h	Rat	LC50
		Skin	12600 mg/kg	Rabbit	LD50
	Isobutyl alcohol	Ingestion	2460 mg/kg	Rat	LD50

		Inhalation 19.2 mg//4h	Rat	LC50
		Skin 3400 mg/kg	Rabbit	LD50
	n-Propyl acetate	Ingestion 8700 mg/kg	Rat	LD50
		Inhalation >16.7 mg//4h	Rat	LC50
		Skin >17800 mg/kg	Rabbit	LD50
	n-Butyl Alcohol	Ingestion 790 mg/kg	Rat	LD50
		Inhalation 24.2 mg//4h	Rat	LC50
		Skin 3400 mg/kg	Rabbit	LD50
	N,N'-Ethylene distearamide	Ingestion >5000 mg/kg	Rat	LD50
		Inhalation >14.6 mg//4h	Rat	LC50
		Skin >20000 mg/kg	Rat	LD50
	Synthetic Amorphous Fumed Silica	Ingestion >5000 mg/kg	Rat	LD50
		Inhalation >2.08 mg//4h	Rat	LC50
		Skin >5000 mg/kg	Rabbit	LD50
	Solvent naphtha (petroleum), light aromatic (C8 to C10)	Ingestion 8400 mg/kg	Rat	LD50
		Inhalation >5.2 mg//4h	Rat	LC50
		Skin >3750 mg/kg	Rabbit	LD50
<b>Likely routes of exposure</b>	Skin, eyes, inhalation, ingestion.			
<b>Delayed, immediate and chronic effects</b>	<b>Eye contact</b>	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.		
	<b>Skin contact</b>	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. Widespread contact with skin for several hours can cause harmful amounts of material to be absorbed.		
	<b>Inhalation</b>	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 damage to target organs.		
	<b>Ingestion</b>	Ingestion can cause abdominal pain, nausea, cramps, headache, dizziness, drowsiness and vomiting. Harmful or fatal if inhaled into the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.		
	<b>Respiratory or skin sensitization</b>	Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.		
	<b>IARC/NTP Classification</b>	No ingredients listed.		
	<b>Carcinogenicity</b>	Contains material which can cause cancer. In the absence of specific test data, the classification of Distillates (petroleum), light distillate hydrotreating process, low-boiling (CAS no 68410-97-9) 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. 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. 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,		

	<p>Volume 100F (2012)).</p> <p><b>Mutagenicity</b> Contains ingredients potentially mutagenic. In the absence of specific test data, the classification of Distillates (petroleum), light distillate hydrotreating process, low-boiling (CAS no 68410-97-9) 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. 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.</p> <p><b>Reproductive toxicity</b> Toluene cross the placental barrier in humans and it is found in breast milk in animals. Toluene has an embryotoxic and/or fetotoxic hazard in humans (US EPA, 2005).</p> <p><b>Specific target organ toxicity - single exposure</b> Central nervous system, respiratory system.</p> <p><b>Specific target organ toxicity - repeated exposure</b> Central nervous system, respiratory system, hearing organs, kidneys, liver.</p>
<b>Interactive effects</b>	No information available for this product.
<b>Other information</b>	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

<b>Ecological toxicity</b>	<p>Fish - Pimephales promelas [flow-through] LC50 18 mg/L; 96h (Butyl acetate)</p> <p>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 5.8 mg/L; 96 h (Toluene)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 5.46-9.83 mg/L; 48 h (Toluene)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 1983 mg/L; 48h (n-Butyl Alcohol) OECD 202</p> <p>Fish - Pimephales promelas [static] LC50 376 mg/L; 96h (n-Butyl Alcohol) OECD 203</p> <p>Algae - Desmodesmus subspicatus EC50 &gt;500mg/L; 72h (n-Butyl Alcohol)</p> <p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 4740 mg/L; 96 h (Acetone)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 12600-12700 mg/L; 48 h (Acetone)</p> <p>Fish - Pimephales promelas [flow-through] LC50 13400-15100 mg/L; 96 h (Ethyl alcohol)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 9268-14221 mg/L; 48 h (Ethyl alcohol)</p> <p>Fish - Fathead minnow, Pimephales promelas - fresh water LC50 60 mg/L; 96 hr (Propyl acetate) OECD TG 203</p> <p>Aquatic Invertebrate - Daphnia Magna Straus - eau douce EC50 91.5 mg/L; 48 hr (Propyl acetate) OECD TG 202</p> <p>Fish - Pimephales promelas [semi-static] LC50 8.2 mg/L; 96 h (CAS no 68410-97-9) ASTM method E729-88a</p> <p>Aquatic Invertebrate - Daphnia magna (semi-static) EC50 2.5-10 mg/L; 48 h (CAS no 68410-97-9)</p> <p>Fish - Pimephales promelas [semi-static] CESO 2.6 mg/L; 14 days (CAS no 68410-97-9)</p>
<b>Persistence</b>	May be persistent in the environment.
<b>Degradability</b>	The product is a hydrocarbon mixture in which some ingredients are not readily biodegradable (OECD 301F). Ethanol is readily biodegradable under aerobic and anaerobic conditions (OECD Test Guideline 301D). 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




	<p>as 92% after 20 days. Toluene in air is rapidly decomposed by photochemical processes, mainly through oxidation by hydroxyl free radicals as well as some decomposition by direct photolysis. The half-life time in air is estimated to be from 1 to 2 days. Toluene is Biodegradable (100% in 10 days, OECD 301C). Its Biochemical Oxygen Demand (BOD) is 2150 mg O<sub>2</sub>/L (IUCLID) and its Chemical Oxygen Demand (COD) is 2520 mg O<sub>2</sub>/g (IUCLID). Isobutyl alcohol is readily biodegradable, 74% in 28 days (OCDE 301D). Acetone is readily biodegradable at 91% in 28 days (OECD 301B). n-Propyl acetate is ready biodegradable in water, 72% in 20 days (OECD 301D).</p>
<b>Bioaccumulative potential</b>	<p>The product is a hydrocarbon mixture of which some ingredients have different bioaccumulation potentials. Ethanol has a Bioconcentration Factor (BCF) value of &lt;10, and its Log Kow value is &lt;0, indicating its potential to bioaccumulate is low. 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). Isobutyl alcohol has a low potential to bioaccumulate with a bioconcentration factor (BCF) of 3 (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. Toluene has Bioconcentration Factor (BCF) in two fish species of 13 and 90, and its partition factor Log Kow of 2,65. These values suggest a low to moderate potential of bioaccumulation. Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factor Log Kow of -0.24, indicating no bioaccumulation. n-Propyl acetate has no bioaccumulation according to its partition coefficient (Log Kow 1.24) and its bioconcentration factor (BCF) 1.8 (EPA).</p>
<b>Mobility in soil</b>	<p>The product is a hydrocarbon mixture of which some ingredients can evaporate into the air while others present a medium to low 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%). n-Butyl acetate will be distributed to air (93.4%), water (5.78%), soil (0.792%), and sediment (&lt;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. Toluene will rapidly evaporate into the atmosphere because of its low soil absorption and its low solubility in water. Its Koc values range from 37 to 178 in a sandy soil suggest that toluene is expected to have high to moderate mobility in soil (TOXNET Data). 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%). 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. n-Propyl acetate will be distributed to air (14.6%), water (42.7%), soil (42.6%), and sediment (&lt;0.1%). The Koc value of n-propyl acetate can be estimated to be 10, suggesting that it is expected to have very high mobility in soil. It is expected to evaporate from moist soil surfaces (EPA).</p>
<b>Other adverse effects</b>	<p>This chemical does not deplete the ozone layer.</p>

### 13. Disposal considerations

	<p><b>Container</b> 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 lacquers, dyes, shellacs, varnishes, paint solvents and thinners, can be reprocessed where 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.</p>
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### 14. Transport information

<b>UN Number</b>	UN 1263
<b>UN Proper Shipping Name</b>	PAINT
<b>Environmental hazards</b>	This material does not contain marine pollutant.
<b>Special precautions for user</b>	Permit required for transportation with proper DANGER placards displayed on vehicle.
<b>TDG - Transportation of Dangerous Goods (Canada)</b>	

<b>Transport hazard class(es)</b>	 Class 3
<b>Packing group</b>	II
<b>IMO/IMDG - International Maritime Transport</b>	
<b>Classification</b>	UN 1263. PAINT. Class 3, PG II. Emergency schedules (EmS-No) F-E, S-E
<b>IATA - International Air Transport Association</b>	
<b>Classification</b>	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
Ethyl alcohol	64-17-5	X	X		X
Butyl acetate (normal)	123-86-4	X	X		X
Distillates (petroleum), light distillate hydrotreating process, low-boiling	68410-97-9		X		
Acetone	67-64-1		X		
Toluene	108-88-3	X	X		X
Isobutyl alcohol	78-83-1	X	X		X
Synthetic Amorphous Fumed Silica	112945-52-5		X		
n-Butyl Alcohol	71-36-3	X	X		X
n-Propyl acetate	109-60-4		X		
N,N'-Ethylene distearamide	110-30-5		X		
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	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.
Ethyl alcohol	64-17-5	X								
Butyl acetate (normal)	123-86-4	X	X						X	
Distillates (petroleum), light distillate hydrotreating process, low-boiling	68410-97-9	X								
Acetone	67-64-1	X	X			X				
Toluene	108-88-3	X	X	X		X	X		X	X

Isobutyl alcohol	78-83-1	X	X						
Synthetic Amorphous Fumed Silica	112945-52-5	X							
n-Butyl Alcohol	71-36-3	X	X	X				X	
n-Propyl acetate	109-60-4	X							
N,N'-Ethylene distearamide	110-30-5	X							
Solvent naphtha (petroleum), light aromatic (C8 to C10)	64742-95-6	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
Toluene	108-88-3		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. 2016-06-02
Version	01
Other information	<p>- The GHS hazards classification in this SDS is from the original SDS provided by the manufacturer.</p> <p>REFERENCES:</p> <ul style="list-style-type: none"> <li>- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, <a href="http://hazmap.nlm.nih.gov/index.php">http://hazmap.nlm.nih.gov/index.php</a></li> <li>- TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, <a href="http://toxnet.nlm.nih.gov/">http://toxnet.nlm.nih.gov/</a></li> <li>- Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), <a href="http://www.reptox.csst.qc.ca">http://www.reptox.csst.qc.ca</a></li> </ul>

- 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

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