



Safety Data Sheet

275 VOC HIGH BUILD LACQUER, FLAT, CLEAR



1. Identification

Product identifier	275 VOC HIGH BUILD LACQUER, FLAT, CLEAR		
Product code	500-0283		
Other means of identification	275 VOC HIGH BUILD LACQ, FLAT, CLEAR.		
Recommended use of the chemical and restrictions on use	A protective and/or decorative finish or accompanying paint product. Not recommended for any other use not detailed on product data sheet or label.		
Manufacturer	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA Tel. 1-800-262-5710 Fax 1-405-262-9310 www.geminicoatings.com	Distributor	Gemini Industries, Inc. 850 Flint Road Toronto, Ontario Canada M3J 2T7 Tel. 1-800-262-5710
Emergency phone number	24-hour Emergency (Spill, Leak, Exposure or accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and MSDS Help: EMI 800-510-8510		

2. Hazard identification

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



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

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

DANGER

H225: Highly Flammable liquid and vapour
 H319: Causes serious eye irritation
 H317: May cause an allergic skin reaction
 H336: May cause drowsiness or dizziness
 H361: Suspected of damaging fertility or the unborn child
 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.
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.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water and soap or take a shower if necessary.
P333+313: If skin irritation or a rash occurs: Get medical advice/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.
P337+313: If eye irritation persists: Get medical advice or attention.
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.
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 an approved waste disposal plant.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Acetone	67-64-1	61 - 63 %
1-Chloro-4-(trifluoromethyl)benzene	98-56-6	7.5 - 8.5 %
Nitrocellulose	9004-70-0	5.5 - 6.5 %
Soybean oil, epoxidized	8013-07-8	4.5 - 5.5 %
Propylene glycol monomethyl ether	107-98-2	4.5 - 5.5 %
Isopropyl alcohol	67-63-0	1.5 - 2.5 %
Silica - Amorphous, gel	112926-00-8	1 - 2 %

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 plenty of water. Remove contact lenses. Flush with water for at least 15 minutes. 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 rinse 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 redness and irritation to eyes. May cause redness, dryness or rash of the skin. May cause an allergic reaction of the skin. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue.
Notes to the physician	Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. 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

Precautions for safe handling	Keep away from heat, sparks and open flame. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Use non-sparking and antistatic tools. Ground/bond all containers when transferring large quantities (5 gallons US or 20 L and more). Use 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).
Storage temperature	10 to 25°C (50 to 77°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Acetone: 2500 ppm. Isopropyl alcohol: 2000 ppm. Silica - Amorphous, gel: 3000 mg/m ³ .			
Acetone	STEL	500 ppm 750 ppm 1000 ppm	1782 mg/m ³ 2380 mg/m ³	ACGIH , BC ON RSST
	TWA (8h)	250 ppm 500 ppm 500 ppm	1188 mg/m ³ 1190 mg/m ³	ACGIH , BC ON RSST
1-Chloro-4-(trifluoromethyl)benzene	TWA (8h)	25 ppm		Other
Propylene glycol monomethyl ether	STEL	75 ppm 100 ppm 150 ppm 150 ppm	553 mg/m ³	BC ACGIH ON RSST
	TWA (8h)	50 ppm 100 ppm 100 ppm	369 mg/m ³	ACGIH , BC ON RSST
Isopropyl alcohol	STEL	400 ppm 500 ppm	1230 mg/m ³	ACGIH , BC, ON RSST
	TWA (8h)	200 ppm 400 ppm	983 mg/m ³	ACGIH , BC, ON RSST
Silica - Amorphous, gel	TWA (8h)	Respirable Dust Total Dust	6 mg/m ³ 10 mg/m ³	RSST ACGIH , ON
Appropriate engineering controls	Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.			
Individual protection measures				
Eye	Wear chemical splash goggles.			
Hands	Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.			
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. 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	Clear	Flammability limits	N/Av.
Odour	Solvent	Flash point	0°C (32°F)
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.
pH	N/Av.	Sensibility to electrostatic charges	Yes
Melting point	N/Av.	Sensibility to sparks and/or friction	No
Freezing point	N/Av.	Vapour density	>1 (Air = 1)
Boiling point	56°C (132.8°F)	Relative density	0.89 to 0.90 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	77.52%	Molecular mass	N/Av.
N/Av.: Not Available N/Av.: 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 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
	1-Chloro-4-(trifluoromethyl)benzene	Ingestion 5546 mg/kg	Rat	LD50
		Inhalation 20 mg/l/4h	Mouse	LC50
		22 mg/l/4h	Rat	LC50
		Skin >2000 mg/kg	Rabbit	LD50
	Nitrocellulose	Ingestion >5000 mg/kg	Rat	LD50
	Propylene glycol monomethyl ether	Ingestion 6600 mg/kg	Rat	LD50

		Inhalation 36.4 mg/l/4h Rat LC50 Skin 13000 mg/kg Rabbit LD50 Ingestion 40000 mg/kg Rat LD50 Skin >20000 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 Silica - Amorphous, gel Ingestion 3160 mg/kg Rat LD50 Inhalation >2.08 mg/l/4h Rat LC50 Skin >2000 mg/kg Rabbit LD50
Likely routes of exposure	Skin, eyes, inhalation, ingestion.	
Delayed, immediate and chronic effects	Eye contact	May cause redness and irritation to eyes. Acetone causes eye irritation in rabbits (Draize test, OECD 405). Isopropyl alcohol is irritating to rabbits' eyes (OECD TG 405).
	Skin contact	May cause redness and slight irritation of the skin. Prolonged and repeated contact may cause dry skin, irritation or dermatitis. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient of this mixture gave not irritating to slightly irritating results.
	Inhalation	Excessive inhalation is harmful. 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.
	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	1-Chloro-4-(trifluoromethyl)benzene is a skin sensitizer (mouse, OECD TG 429). This product is not a respiratory sensitizer.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects. 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.
	Specific target organ toxicity - single exposure	Central nervous 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. 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. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.	

12. Ecological information

Ecological toxicity	<p>Fish - Oncorhynchus mykiss - Rainbow trout Aquatic Invertebrate - Daphnia magna Fish - Fathead minnow, Pimephales promelas - fresh water Aquatic Invertebrate - Crustaceans, Daphnia Magna Plant - Lettuce seed germination, Lactuca Sativa Algea, Pseudokirchneriella subcapitata Fish - Danio rerio Aquatic Invertebrate - Daphnia magna (semi-static) Algea - Desmodesmus subspicatus Fish - Pimephales promelas [static] Aquatic Invertebrate - Daphnia magna Algea, Selenastrum capricornutum</p> <p>LC50 4.74-6.33 mg/L; 96 h (acetone) EC50 12600-12700 mg/L; 48 h (acetone) LC50 9640 mg/L; 96 h (Isopropyl alcohol) EC50 3644 mg/L; 48 hr (Isopropyl alcohol) EC50 2100 mg/L; 72 hr (Isopropyl alcohol) EC50 579 mg/L; 96h (Nitrocellulose) LC50 3 mg/L; 96h (CAS no 98-56-6) OECD 203 EC50 2 mg/L; 48h (CAS no 98-56-6) EC50 >100 mg/L; 72h (Soybean oil) LC50 20800 mg/L; 96h (107-98-2) EC50 23300 mg/L; 48h (107-98-2) LD50 >1000 mg/L; 96h (107-98-2)</p>
Persistence	<p>Contains an or many ingredients that may be persistent in aquatic environment.</p>
Degradability	<p>Acetone undergoes slow photolysis in air (half-life time $T_{1/2} = 80$ h) and in water ($T_{1/2} > 43$ h). 1-Chloro-4-(trifluoromethyl)benzene is not degraded by photolysis in water. It has also showed to be not ready biodegradable, 19.2% during 28 days (OECD TG 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). Isopropyl alcohol is biodegradable, 49% in 5 days and 70% in 20 days (TOXNET). It does not undergo photolysis. Its atmospheric degradation (OH radical attack) in air has a half-time $T_{1/2}$ of 18 to 25 hours. Propylene glycol monomethyl ether is ready biodegradable, 73%-91% during 28 days (OECD TG 301F).</p>
Bioaccumulative potential	<p>Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factor Log Kow of -0.24, indicating no bioaccumulation. According to an estimated Bioconcentration Factors (BCF) of 110 in fish and an estimated partition coefficient log Kow of 3.6 suggest that 1-Chloro-4-(trifluoromethyl)benzene has a potential for bioaccumulation in aquatic organisms is high (TOXNET). The Log Kow value <0.4 and bioconcentration factor (BCF) value <1 for isopropyl alcohol show no potential to bioaccumulate (IUCLID). Propylene glycol monomethyl ether has a Bioconcentration Factor (BCF) of 2.2 and a partition factor Log Kow of -0.49, indicating no potential for bioconcentration in aquatic organisms (TOXNET).</p>
Mobility in soil	<p>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. The Koc value of 1600 suggest that 1-Chloro-4-(trifluoromethyl)benzene is expected to have low mobility in soil (TOXNET). Isopropyl alcohol is soluble in water and will quickly evaporate into the air. There is no partition in the ground. Propylene glycol monomethyl ether is very soluble in water. Then, it is expected to have very high mobility in soil.</p>
Other adverse effects	<p>This chemical does not deplete the ozone layer.</p>

13. Disposal considerations

Container 	<p>Important! Prevent waste generation. Use in full. DO NOT dispose of residue in sewers, streams or drinking water supply. 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.</p>
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- 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

No ingredients listed.

Other regulations

WHMIS 1988



B2

D2B

Class B2 : Flammable Liquid

Class D2B : Toxic material causing other toxic effects

HMIS



② Health

③ Flammability

① Reactivity

ⓧ Protective Equipment

NFPA



16. Other information

Date (YYYY-MM-DD)	GEMINI INDUSTRIES, INC. 2016-02-11
Version	01
Other information	<p>- This SDS and the GHS hazards classification is a French translation of the original English version (SDS) from the manufacturer.</p> <p>REFERENCES:</p> <ul style="list-style-type: none"> - 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 <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association</p>

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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