



Safety Data Sheet

275 VOC CONV. VARNISH, SATIN, CLEAR



1. Identification

Product identifier	275 VOC CONV. VARNISH, SATIN, CLEAR		
Product code	550-0202		
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 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	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 2A)
 Skin sensitizer (Category 1)
 Germ cell mutagenicity (Category 1B)
 Carcinogenicity (Category 1A)
 Reproductive toxicity (Category 1A)
 Specific target organ toxicity, single exposure, Narcotic effects (Category 3)

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
- H350: May cause cancer
- H340: May cause genetic defects
- H360: May damage fertility or the unborn child
- H319: Causes serious eye irritation
- H317: May cause an allergic skin reaction

H336: May cause drowsiness or dizziness
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.
P261: Avoid breathing mist, vapours and spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or 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.
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.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P308+313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see 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	40 - 42 %
Urea, polymer with formaldehyde, butylated	68002-19-7	10 - 12 %
Ethyl Alcohol	64-17-5	7 - 9 %
1-Chloro-4-(trifluoromethyl)benzene	98-56-6	5 - 7 %
Methyl Propyl Ketone	107-87-9	1.5 - 2.5 %
Synthetic Amorphous Fumed Silica	112945-52-5	1.5 - 2.5 %
Propylene glycol monomethyl ether acetate	108-65-6	0.5 - 1.5 %

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 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 irritation to skin and eyes. 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. If water is used, fog nozzles are preferable.

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. Stay against the wind spill. 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-sparkling 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-sparkling and antistatic tools. Ground/bond all containers when transfer 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 used. Containers of this material may be hazardous when emptied. Since empty containers retain product residues (vapour, liquid), all hazard precautions given in this sheet must be observed. Do not eat, do
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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.
 Ethyl alcohol: 3300 ppm.
 Methyl Propyl Ketone: 1500 ppm.
 Synthetic Amorphous Fumed Silica: 3000 mg/m³.

Acetone	STEL	500 ppm		ACGIH , BC
		750 ppm	1782 mg/m ³	ON
		1000 ppm	2380 mg/m ³	RSST
		250 ppm		ACGIH , BC
Ethyl Alcohol	TWA (8h)	500 ppm	1188 mg/m ³	ON
		500 ppm	1190 mg/m ³	RSST
		1000 ppm		ACGIH , BC, ON
		1000 ppm	1880 mg/m ³	RSST
Synthetic Amorphous Fumed Silica	TWA (8h)	Respirable Dust	1.5 mg/m ³	BC
		Respirable Dust	3 mg/m ³	ACGIH , ON
		Total Dust	4 mg/m ³	BC
		Respirable Dust	6 mg/m ³	RSST
		Total Dust	10 mg/m ³	ACGIH , ON
Methyl Propyl Ketone	Ceiling	150 ppm		ACGIH , ON
		STEL	250 ppm	BC
		TWA (8h)	150 ppm	BC
		150 ppm	530 mg/m ³	RSST
Propylene glycol monomethyl ether acetate	STEL	75 ppm		BC
		TWA (8h)	50 ppm	BC , US AIHA
		50 ppm	270 mg/m ³	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. Ensure that eyewash stations and safety showers are close to the workstation.

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. 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 vapor cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapor 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	N/Av.	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	N/Av.
Freezing point	N/Av.	Vapour density	>1 (Air = 1)
Boiling point	56°C (132.8°F)	Relative density	0.9353 kg/L (Water = 1)
Solubility	Soluble in water (>50%)	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	> Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	N/Av.	Viscosity	N/Av.
Percent Volatile	59.9575%	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 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	<p>Acetone</p> <p>Ethyl Alcohol</p> <p>1-Chloro-4-(trifluoromethyl)benzene</p> <p>Methyl Propyl Ketone</p> <p>Synthetic Amorphous Fumed Silica</p> <p>Propylene glycol monomethyl ether acetate</p>	<p>Ingestion 5800 mg/kg Rat LD50</p> <p>Inhalation 71.4 mg/l/4h Rat LC50</p> <p>Skin 15800 mg/kg Rabbit LD50</p> <p>Ingestion 7060 mg/kg Rat LD50</p> <p>Inhalation 39 mg/l/4h Mouse LC50</p> <p>Skin 20000 mg/kg Rabbit LD50</p> <p>Ingestion 5546 mg/kg Rat LD50</p> <p>Inhalation 20 mg/l/4h Mouse LC50</p> <p>33 mg/l/4h Rat LC50</p> <p>Skin >2000 mg/kg Rabbit LD50</p> <p>Ingestion 3730 mg/kg Rat LD50</p> <p>1600 mg/kg Mouse LD50</p> <p>Inhalation 11 mg/l/4h Rat LC50</p> <p>Skin 6472 mg/kg Rabbit LD50</p> <p>Ingestion >5000 mg/kg Rat LD50</p> <p>Inhalation >2.08 mg/l/4h Rat LC50</p> <p>Skin >5000 mg/kg Rabbit LD50</p> <p>Ingestion 8532 mg/kg Rat LD50</p> <p>Inhalation 28.7 mg/l/4h Rat LC50</p> <p>Skin >5000 mg/kg Rabbit LD50</p>
Likely routes of exposure	<p>Skin, eyes, inhalation, ingestion.</p>	
Delayed, immediate and chronic effects	<p>Eye contact</p> <p>Skin contact</p> <p>Inhalation</p> <p>Ingestion</p> <p>Respiratory or skin sensitization</p> <p>IARC/NTP Classification</p> <p>Carcinogenicity</p> <p>Mutagenicity</p> <p>Reproductive toxicity</p> <p>Specific target organ toxicity - single exposure</p>	<p>May cause irritation, redness, tearing and blurred vision. Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with each ingredient of this mixture gave not irritating to irritating results.</p> <p>May cause redness, dryness, rash and skin irritation. Prolonged and repeated contact may cause dry skin, irritation or dermatitis. Widespread contact with skin for several hours can cause harmful amounts of material to be absorbed. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient of this mixture gave not irritating to irritating results.</p> <p>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. The severity of symptoms may vary depending on exposure conditions. Inhalation of high vapour concentrations or prolonged breathing of lower concentrations may result in damage to the liver, kidneys, lungs and blood forming organs. Repeated and prolonged occupational overexposure to solvents may cause brain and nervous system damage.</p> <p>May cause gastro-intestinal irritation with nausea and vomiting.</p> <p>1-Chloro-4-(trifluoromethyl)benzene is a skin sensitizer (mouse, OECD TG 429). May cause an allergic reaction of the skin. This product is not a respiratory sensitizer.</p> <p>No ingredients listed.</p> <p>There is sufficient evidence for the carcinogenicity of alcoholic 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. However, the possibility of such effects occurring is for chronic consumers of ethyl alcohol. The risk of cancer depends on duration and level of exposure.</p> <p>Contains ingredients potentially mutagenic.</p> <p>Possible effects on reproduction (ethanol). A significant and prolonged consumption of ethyl alcohol during pregnancy can cause an increased risk of developmental abnormalities fetus humans.</p> <p>Central nervous system.</p>

	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. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

12. Ecological information

Ecological toxicity	<p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 4.74-6.33 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>Aquatic Invertebrate - Daphnia magna EC50 3.68 mg/L; 48 h (CAS no 98-56-6)</p> <p>Fish - Pimephales promelas [flow-through] LC50 1190-1290 mg/L; 96 h (methyl propyl ketone)</p> <p>Fish - Pimephales promelas [static] LC50 161 mg/L; 96 h (CAS no 108-65-6)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 >500 mg/L; 48 h (CAS no 108-65-6)</p> <p>Aquatic Invertebrate - Daphnia magna EC50 >10000 mg/L; 24 h (CAS no 112945-52-5)</p>
Persistence	The product contains components that may persist in the environment.
Degradability	<p>Acetone undergoes slow photolysis in air (half-life time T1/2 = 80 h) and in water (T1/2 >43 h). Ethanol is readily biodegradable under aerobic and anaerobic conditions (OECD Test Guideline 301D).</p> <p>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). Methyl propyl ketone (CAS no 107-87-9) has been shown to readily biodegrade at 70% under aerobic and conditions (OCDE TG 301D). Propylene glycol monomethyl ether acetate is readily biodegradable (83% in 10 days) OECD Guideline 301 E.</p>
Bioaccumulative potential	<p>Acetone has a Bioconcentration Factor (BCF) of 0.65 and a partition factors Log Kow of -0.24, indicating no bioaccumulation. Ethanol has a Bioconcentration Factor (BCF) value of <10, and its Log Kow value is <0, indicating its potential to bioaccumulate is low. According to an estimated Bioconcentration Factors (BCF) of 110 in fish and an estimated partition coefficient log Kow of 3.6 suggest that</p> <p>1-Chloro-4-(trifluoromethyl)benzene has a potential for bioaccumulation in aquatic organisms is high (TOXNET). Methyl propyl ketone (CAS no 107-87-9) is soluble in water and has a low Bioconcentration Factor (BCF) of 3 and a log Kow of 0,93. Methyl propyl ketone is not be expected to accumulate in food chains. Propylene glycol monomethyl ether acetate is not expected to bioaccumulate based on a low partition coefficient (Log Kow 0.36).</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. 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%). The Koc value of 1600 suggest that</p> <p>1-Chloro-4-(trifluoromethyl)benzene is expected to have low mobility in soil (TOXNET). Methyl propyl ketone (CAS no 107-87-9) can be volatilized from moist soil surfaces (SRC). The estimated Koc value of 75 indicates that it is expected to have high mobility in soil. Propylene glycol monomethyl ether acetate is soluble in water and will be distributed to air (10.22%), water (89.73%), soil (0.03%), and sediment (0.02%).</p>
Other adverse effects	This chemical does not deplete the ozone layer.

				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				
Urea, polymer with formaldehyde, butylated	68002-19-7	X								
Ethyl Alcohol	64-17-5	X								
1-Chloro-4-(trifluoromethyl)benzene	98-56-6	X								
Methyl Propyl Ketone	107-87-9	X								
Synthetic Amorphous Fumed Silica	112945-52-5	X								
Propylene glycol monomethyl ether acetate	108-65-6	X								

Other regulations

WHMIS 1988



B2

D2B

Class B2 : Flammable Liquid

Class D2B : Toxic material causing other toxic effects

HMIS



3 Health

3 Flammability

1 Reactivity

(X) Protective Equipment

NFPA



16. Other information

Date (YYYY-MM-DD)	GEMINI INDUSTRIES, INC. 2016-01-28
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 OSHA: Occupational Safety and Health Administration (USA)</p>

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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