SAFETY DATA SHEET

SECTION 1 - Chemical Product and Company Information

Product Name: 10 DEGREE CONVERSION VARNISH Product Code: 550-0048

Manufactured by:
Gemini Coatings
2300 Holloway Drive
El Reno, OK 73036
800-262-5710

24- Hour Emergency (Spill, Leak, Exposure or Accident):
INFOTRAC 800-535-5053
Outside USA, Call Collect 1-352-323-3500

24- Hour Emergency HAZMAT Response and MSDS Help:
EMI 800-510-8510

Product Use: A protective and/or decorative finish or accompanying product (reference label or product data sheet for more information).
Not recommended for: Any other use not detailed on product data sheet or label .

SECTION 2 - Hazards Identification

GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Mutagen	1B	Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1A	Based on human evidence

GHS Hazards

H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child

GHS Precautions

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/hot surfaces – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/mixers/equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash any exposed skin thoroughly after handling

P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see First Aid section on this label)
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P342+P311	Call a POISON CENTER or doctor/physician
P370+P378	In case of fire: Use the NFPA Class B extinguisher for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations.

Signal Word: **Danger**

SECTION 3 - Composition/Information on Ingredients			
Chemical Name / CAS No.	**OSHA Exposure Limits**	**ACGIH Exposure Limits**	**Other Exposure Limits**

Xylenes (o-, m-, p- isomers) 1330-20-7 20 to 30%	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	
1-Butanol 71-36-3 10 to 20%	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Urea, polymer with formaldehyde, isobutylated 68002-18-6 10 to 20%			
Ethylbenzene 100-41-4 5 to 10%	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Isobutyl alcohol 78-83-1 1 to 5%	100 ppm TWA; 300 mg/m3 TWA	50 ppm TWA	NIOSH: 50 ppm TWA; 150 mg/m3 TWA
Silica, amorphous, fumed, crystalline-free 112945-52-5 1 to 5%			
n-Propanol 71-23-8 1 to 5%	200 ppm TWA; 500 mg/m3 TWA	100 ppm TWA	NIOSH: 200 ppm TWA; 500 mg/m3 TWA 250 ppm STEL; 625 mg/m3 STEL
2-Propen-1-ol, polymer with ethenylbenzene 25119-62-4 1 to 5%			
Ethyl alcohol 64-17-5 0.1 to 1.0%	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Formaldehyde 50-00-0 0.1 to 1.0%	0.75 ppm TWA	0.3 ppm Ceiling	NIOSH: 0.016 ppm TWA 0.1 ppm Ceiling (15 min)

SECTION 4 - First Aid Measures

Inhalation:
Remove exposed individual to fresh air and assist breathing if necessary. Seek medical attention.
Eye Contact:
Flush eyes with lukewarm water for 15 minutes. Seek medical attention immediately.
Skin:
Remove contaminated clothing, wash area immediately with soap and water. See physician if irritation persists.
Ingestion:
Rinse mouth out immediately. Drink 1 or 2 glasses of water to dilute. DO NOT induce vomiting. Contact physician or poison control center immediately.

SECTION 5 - Fire Fighting Measures

Alcohol Foam, CO2, Dry Chemical
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even empty) because product (even residue) may ignite explosively. Liquid and vapor states of this substance are dangerous fire hazards and moderate explosion hazards when exposed to heat or flame.
Oxidation may produce carbon and nitrogen oxides.
Clear fire area of unprotected personnel. Do not enter confined space without helmet, face shield, bunker coat, gloves, rubber boots and a positive pressure NIOSH-approved self-contained breathing apparatus. A water stream can

scatter flames. A spray of water may be used to cool closed containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
Use the National Fire Protection Association Class B extinguisher.

SECTION 6 - Accidental Release Measures

Stay upwind and away from spill or leak unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking tools for clean up. Cover with inert material to reduce fumes. Keep out of drains, sewer or waterways.

If large spill occurs, alert spill response teams. Contact fire authorities. Notify local health and pollution control agencies.

SECTION 7- Handling and Storage

Handling:
Bond and ground metal containers when transferring liquid. Avoid free fall of liquid in excess of a few inches. Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this sheet must be observed.

Storage:
Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. DO NOT SMOKE in or near storage areas.

SECTION 8 - Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Xylenes (o-, m-, p- isomers) 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	
1-Butanol 71-36-3	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Urea, polymer with formaldehyde, isobutylated 68002-18-6			
Ethylbenzene 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Isobutyl alcohol 78-83-1	100 ppm TWA; 300 mg/m3 TWA	50 ppm TWA	NIOSH: 50 ppm TWA; 150 mg/m3 TWA
Silica, amorphous, fumed, crystalline-free 112945-52-5			
n-Propanol 71-23-8	200 ppm TWA; 500 mg/m3 TWA	100 ppm TWA	NIOSH: 200 ppm TWA; 500 mg/m3 TWA 250 ppm STEL; 625 mg/m3 STEL
2-Propen-1-ol, polymer with ethenylbenzene 25119-62-4			
Ethyl alcohol 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Formaldehyde 50-00-0	0.75 ppm TWA	0.3 ppm Ceiling	NIOSH: 0.016 ppm TWA 0.1 ppm Ceiling (15 min)

Use local exhaust as required to control vapor concentrations.
Avoid prolonged or repeated breathing of vapors.

Respiratory Protection:
If exposure exceeds TLV or PELs, use NIOSH approved respirator to prevent overexposure.

Skin Protection:
Required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile. An apron should be worn to avoid skin contact.

Eye Protection:
Wear splash proof googles and face shield if there is a likelihood of contact with eyes.

Hygenic Practices
Wash hands thoroughly before eating or using the restroom. Remove contaminated clothing immediately and do not wear again until it has been properly laundered.

SECTION 9 - Physical and Chemical Properties

Vapor Density	Heavier Than Air	**Evaporation Rate**	Faster than Butyl Acetate
Boiling range:	97 - 141°C	**Melting point:**	N/A
Freezing point:	N/A	**Flash point:**	59°F,15°C
Flammability:	N/A	**Explosive Limits:**	N/A
Autoignition temperature:	343°C	**Decomposition temperature:**	N/A
Relative Density:	N/A	**Vapor Pressure**	N/A
Odor threshold:	N/A	**pH:**	N/A
SPECIFIC GRAVITY	0.9907	**Solubility:**	N/A
Partition coefficient (n-octanol/water):	N/A	**Viscosity:**	N/A
Grams VOC less water:	N/A	**% VOLUME VOLATILE (VOC)**	62.8860
% WT. VOLATILE (VOC)	53.3039	**% Pig. by wt.**	4.4986
Lbs VOC/Gallon Solids	11.8481	**VOLATILE WT%**	53.3039
SOLIDS VOL%	37.1140	**DENSITY (Lb/Gal)**	8.2495
SPREAD @ 1 MIL	595.3087	**HAPS (lbs/gl)**	2.3038
Appearance	Liquid	**Odor**	N/A
Physical State	Liquid	**Material VOC (g/l)**	526.9307
Coating VOC (g/l)	526.9307	**Material VOC (Lb/Gl)**	4.3973
Coating VOC (Lb/Gl)	4.3973		

SECTION 10 - Stability and Reactivity

Stability: Stable under normal conditions.

Materials to Avoid: Strong oxidizing agents, strong alkalines, strong mineral acids.

Conditions to avoid: high heat, sparks, flames, static discharge.

Hazardous Decomposition: Oxidation may produce carbon and nitrogen oxides.
Hazardous polymerization will not occur.

SECTION 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 2,790mg/kg
Inhalation Toxicity LC50: 92mg/L

Component Toxicity

71-36-3	1-Butanol Oral LD50: 700 mg/kg (Rat) Dermal LD50: 3,402 mg/kg (Rabbit)
100-41-4	Ethylbenzene Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat)
78-83-1	Isobutyl alcohol Oral LD50: 2,460 mg/kg (Rat) Dermal LD50: 3,400 mg/kg (Rabbit)
71-23-8	n-Propanol Oral LD50: 1,870 mg/kg (Rat) Dermal LD50: 4,049 mg/kg (Rabbit)
50-00-0	Formaldehyde Oral LD50: 100 mg/kg (Rat) Dermal LD50: 270 mg/kg (Rabbit) Inhalation LC50: 1 mg/L (Rat)

Primary Routes of Entry: Inhalation, Skin Contact, Eyes, Ingestion

Skin:
Skin contact can cause redness, dryness or rash. Prolonged contact can cause irritation, dry skin, cracks, and dermititis.

Ingestion:
Can cause vomiting, nausea, diarrhea, and gastrointestinal irritation.

Inhalation:
Excessive inhalation of vapors can cause nasal and repiratory irritation, dizziness, weakness, fatigue, nausea, headache possible unconsciousness and even asphyxiation. High vapor concentrations or porlonged breathing of lower concentrations may result in damage to the liver, kidneys, lungs and blood forming organs . Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Eyes:
Can cause irritation, redness, tearing and blurred vision.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) .

CAS Number	Description	% Weight	Carcinogen Rating
100-41-4	Ethylbenzene	5 to 10%	Ethylbenzene: IARC: Possible human carcinogen OSHA: listed
50-00-0	Formaldehyde	0.1 to 1.0%	Formaldehyde: NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed
64-17-5	Ethyl alcohol	0.1 to 1.0%	Ethyl alcohol: IARC: Human carcinogen OSHA: listed

SECTION 12 - Ecological Information

Ecological Information:
Uncontrolled release of the product may result in contamination of air, ground, waterways and/or sewers .

Component Ecotoxicity

Xylenes (o-, m-, p- isomers)	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

1-Butanol	96 Hr LC50 Pimephales promelas: 1730 - 1910 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1740 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 100000 - 500000 µg/L [static]; 96 Hr LC50 Pimephales promelas: 1910000 µg/L [static] 48 Hr EC50 Daphnia magna: 1983 mg/L; 48 Hr EC50 Daphnia magna: 1897 - 2072 mg/L [Static] 96 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >500 mg/L
Ethylbenzene	96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]
Isobutyl alcohol	96 Hr LC50 Pimephales promelas: 1370 - 1670 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 375 mg/L [static] (fry); 96 Hr LC50 Lepomis macrochirus: 1480 - 1730 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1120 - 1520 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 1300 mg/L; 48 Hr EC50 Daphnia magna: 1070 - 1933 mg/L [Static]
n-Propanol	96 Hr LC50 Pimephales promelas: 4480 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 3642 mg/L; 48 Hr EC50 Daphnia magna: 3339 - 3977 mg/L [Static]
Ethyl alcohol	96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through] 48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Formaldehyde	96 Hr LC50 Pimephales promelas: 22.6 - 25.7 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1510 µg/L [static]; 96 Hr LC50 Brachydanio rerio: 41 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.032 - 0.226 mL/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 100 - 136 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.2 - 29.7 mg/L [static] 48 Hr LC50 Daphnia magna: 2 mg/L; 48 Hr EC50 Daphnia magna: 11.3 - 18 mg/L [Static]

SECTION 13 - Disposal Considerations

Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations. See Section 8 for information on exposure control and necessary personal protective equipment.

SECTION 14 - Transportation Information

Ship according to the Department of Transportation (DOT) 49 CFR regulations.

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	PAINT	UN1263	II	3

Freight Class: 55

SECTION 15 - Regulatory Information

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):
This product contains the follosing listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

50-00-0 Formaldehyde

64-17-5 Ethyl alcohol
100-41-4 Ethylbenzene

The following ingredients are listed in the TSCA Section 8(b) Inventory (Hydrated forms of chemical substances are exempt from the inventory as mixtures; the anhydrous chemical substances, however, are reportable for the Inventory):

50-00-0 Formaldehyde
64-17-5 Ethyl alcohol
25119-62-4 2-Propen-1-ol, polymer with ethenylbenzene
71-23-8 n-Propanol
78-83-1 Isobutyl alcohol
100-41-4 Ethylbenzene
68002-18-6 Urea, polymer with formaldehyde, isobutylated
71-36-3 1-Butanol
1330-20-7 Xylenes (o-, m-, p- isomers)

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

50-00-0 Formaldehyde
100-41-4 Ethylbenzene
1330-20-7 Xylenes (o-, m-, p- isomers)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical:

50-00-0 Formaldehyde
100-41-4 Ethylbenzene
71-36-3 1-Butanol
1330-20-7 Xylenes (o-, m-, p- isomers)

SECTION 16 - Disclaimer

Date Prepared: 11/9/2017
Date revised: 2017-11-09 Reviewer Revision 2

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