



M615-2980 Ultra Clear Conversion Varnish Gloss 80 Sheen

MATERIAL SAFETY DATA SHEET

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Health: 2 Flammability: 3 Reactivity 0

PRODUCT NAME: M615-2980 Ultra Clear Conversion Varnish Gloss 80 Sheen

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE: 19/09/05
SUPERCEDES: 09/05/05
MSDS NO. M615-2980
OSHA HAZ. CLASS: Eye irritant. Neurotoxin - may cause nervous system damage.
Mucous membrane (respiratory tract) irritant.

II. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	%	CAS #	PEL
alkyd resin solids	21-30	PROPRIETARY	No PEL established
butanol	11-20	78-92-2	150 ppm TWA; 450 mg/m3 TWA
m-xylene	11-20	108-38-3	No PEL established
n-butyl acetate	1-10	123-86-4	150 ppm TWA; 710 mg/m3 TWA
isobutanol	1-10	78-83-1	100 ppm TWA; 300 mg/m3 TWA
o-xylene	1-10	95-47-6	No PEL established
isobutyl acetate	1-10	110-19-0	150 ppm TWA; 700 mg/m3 TWA
ethylbenzene	1-10	100-41-4	100 ppm TWA; 435 mg/m3 TWA
Methyl acetate	1-10	79-20-9	200 ppm TWA; 610 mg/m3 TWA
p-xylene	1-10	106-42-3	No PEL established
PM acetate	1-10	108-65-6	No PEL established
ethanol	1-10	64-17-5	1000 ppm TWA; 1900 mg/m3 TWA
toluene	<1	108-88-3	200 ppm TWA; C 300 ppm
isopropanol	<1	67-63-0	400 ppm TWA; 980 mg/m3 TWA
formaldehyde	<1	50-00-0	0.75 ppm TWA

III. HAZARDS IDENTIFICATION

Routes of Entry: Inhalation., Absorption., Ingestion., Skin contact., Eye contact.
Medical Conditions Aggravated: Respiratory disease including asthma and bronchitis. Skin disease including eczema and sensitization. Eye disease. Digestive tract disease. Liver disease. Kidney disease.

Immediate (Acute) Health Effects

- Inhalation:** Irritation may be delayed for several hours. Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.
- Skin Contact:** Moderately irritating to the skin. Substance causes moderate skin irritation. Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
- Eye Contact:** Irritating but will not permanently injure eye tissue. Can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible. Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.
- Skin Absorption:** Toxic and may be harmful if absorbed through the skin; may produce target organ damage. Component(s) may be absorbed through intact skin, but it is unlikely that harmful effects will occur unless contact is prolonged, repeated, and extensive. Can be absorbed through the skin but exposure must be extensive before adverse health effects occur. Minimal hazard in normal industrial use. May cause gastrointestinal discomfort.
- Ingestion:** Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

Target Organ Acute Toxicity:

n-Butyl alcohol	eyes, CNS, skin, respiratory system
m-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system
n-Butyl acetate	eyes, skin, respiratory system, CNS
Isobutyl alcohol	eyes, skin, respiratory system, CNS
o-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system
Isobutyl acetate	eyes, skin, respiratory system, CNS
Ethyl benzene	eyes, respiratory system, skin, CNS
Methyl acetate	skin, eyes, respiratory system, CNS
p-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system
Ethyl alcohol	respiratory system, skin, eyes, CNS, liver, blood, reproductive system
Toluene	CNS, liver, kidneys, skin, eyes, respiratory system
Isopropyl alcohol	eyes, skin, respiratory system
Formaldehyde (and formalin)	eyes, skin, respiratory system, nasal cancer

Long-Term (Chronic) Health Effects:

- Carcinogenicity:** ACGIH. IARC. NIOSH. NTP. OSHA. Contains a substance that is a probable cancer hazard based on human studies.
- Reproductive and Developmental Toxicity:** A component in this product has been shown to cause birth defects and reproductive disorders in laboratory animals at doses that could be encountered in the workplace. Possible reproductive hazard.
- Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Inhalation:	Upon prolonged and/or repeated exposure, can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.
Skin Contact:	May cause lingering affects but not likely to result in permanent damage if the exposure is eliminated. Prolonged or repeated contact may produce defatting of the skin leading to irritation and dermatitis. Prolonged or repeated contact may cause irritation. Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Eye Contact:	Upon prolonged or repeated contact, can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible.
Skin Absorption:	Upon prolonged or repeated exposure, toxic if absorbed through the skin. Likely to cause systemic damage.
Target Organ Chronic Toxicity:	Respiratory Tract. Skin. Eyes. Nervous System. Digestive Tract. Liver. Kidneys. Blood. Skin. Respiratory Tract. Nervous System. Eyes.
Supplemental Health Hazard Information:	No additional health information available.

IV. FIRST AID

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eyes:	Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.
Notes to MD:	No additional first aid information available.

V. FIRE FIGHTING MEASURES

Flammability Summary:

Flash Point:	63 (CALC.) °F
Upper Flammable/Explosive Limit, % in air:	3.8 @ 77° F
Lower Flammable/Explosive Limit, % in air:	1.1 @ 77° F

Fire Hazards: Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

Extinguishing Media: Carbon dioxide Dry chemical Water spray Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used to extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

Fire Fighting Instructions: Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide Toxic gases

VI. ACCIDENTAL RELEASE MEASURES

Health Consideration for Spill Response: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Spill Mitigation Procedures General Methods: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

VII. HANDLING AND STORAGE

Handling: Use spark-proof tools and explosion-proof equipment. Wash thoroughly after handling. Avoid contact with material. Ground and bond containers when transferring material. Keep in air-tight containers- material is hygroscopic. Remove contaminated clothing and wash before reuse. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Harmful or irritating material. Avoid contact and avoid breathing the material. Use only in a well ventilated area.

Storage: Keep away from sources of ignition. Keep away from heat, sparks, and flame. Do not store near combustible materials. Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed.

VIII. ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Explosion proof exhaust ventilation should be used. Facilities storing or using this material should be equipped with an eyewash and safety shower. Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Protective Equipment

Respiratory Tract:

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage should be implemented.

Eyes:

Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

Skin:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

IX. PHYSICAL DATA

Physical State:	CLOUDY LIQUID
Odor:	STRONG SOLVENT
Solids Vol %:	35.404
Solids Wt %:	43.0698
Material VOC lbs/gal:	4.3738
Material VOC gms/l:	525.2577
Coatings VOC lbs/gal:	4.5076
Coatings VOC gms/l:	541.3181
Weight per gallon lbs:	8.1056

VOC data per US EPA guidelines. State and local variations may apply.

X. STABILITY AND REACTIVITY

Stability Information:	Stable. Stable under normal conditions.
Conditions to Avoid:	Avoid: heat, sparks, flame and oxidizing agents. None known.
Chemical Incompatibility:	Acids. Acetic anhydride. Peroxides. Oxidizing materials. Strong oxidizing agents. Strong acids. Strong alkalies.
Hazardous Polymerization:	Hazardous Polymerization will not occur.

XI. TOXICOLOGICAL INFORMATION

Chemical Name	CAS Number	LD50/LC50
sec-Butyl alcohol	78-92-2	Inhalation LC50 Rat : 8000 ppm/4H; Oral LD50 Rat : 790 mg/kg; Oral LD50 Mouse : 2680 mg/kg; Dermal LD50 Rabbit : 3400 mg/kg
m-Xylene	108-38-3	Oral LD50 Rat : 5 gm/kg; Dermal LD50 Rabbit : 14100 uL/kg
Acetic acid, butyl ester	123-86-4	Inhalation LC50 Rat : 2000 ppm/4H; Inhalation LC50 Mouse : 6 gm/m ³ /2H; Oral LD50 Rat : 10768 mg/kg; Oral LD50 Mouse : 6 gm/kg; Dermal LD50 Rabbit : >17600 mg/kg
Isobutyl alcohol	78-83-1	Oral LD50 Rat : 2460 mg/kg; Dermal LD50 Rabbit : 3400 mg/kg
Acetic acid, isobutyl ester	110-19-0	Oral LD50 Rat : 13400 mg/kg; Dermal LD50 Rabbit : >17400 mg/kg
Benzene, ethyl-	100-41-4	Oral LD50 Rat : 3500 mg/kg; Dermal LD50 Rabbit : 17800 uL/kg
Acetic acid, methyl ester	79-20-9	Oral LD50 Rat : >5 gm/kg; Dermal LD50 Rabbit : >5 gm/kg
p-Xylene	106-42-3	Inhalation LC50 Rat : 4550 ppm/4H; Oral LD50 Rat : 5 gm/kg

Acetic acid, 2-methoxy-1-methylethyl ester	108-65-6	Oral LD50 Rat : 8532 mg/kg; Dermal LD50 Rabbit : >5 gm/kg
Ethyl alcohol	64-17-5	Inhalation LC50 Rat : 20000 ppm/10H; Inhalation LC50 Mouse : 39 gm/m3/4H; Oral LD50 Rat : 7060 mg/kg; Oral LD50 Mouse : 3450 mg/kg
Toluene	108-88-3	Inhalation LC50 Rat : 49 gm/m3/4H; Inhalation LC50 Mouse : 400 ppm/24H; Oral LD50 Rat : 636 mg/kg; Dermal LD50 Rabbit : 14100 uL/kg
Isopropyl alcohol	67-63-0	Inhalation LC50 Rat : 16000 ppm/8H; Oral LD50 Rat : 5045 mg/kg; Oral LD50 Mouse : 3600 mg/kg; Dermal LD50 Rabbit : 12800 mg/kg
Formaldehyde	50-00-0	Inhalation LC50 Rat : 203 mg/m3; Inhalation LC50 Mouse : 454 gm/m3/4H; Oral LD50 Rat : 100 mg/kg; Oral LD50 Mouse : 42 mg/kg; Dermal LD50 Rabbit : 270 uL/kg

XII. ECOLOGICAL INFORMATION

Overview (for ingredients): Highly/very toxic to fish and other water organisms. Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.

XIII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product: The waste may be a listed and/or characteristic hazardous waste. Spent or discarded material is a hazardous waste.

Disposal Methods: Comply with all Local, State, Federal, and Provincial Environmental Regulations. Dispose of by incineration following Federal, State, Local, or Provincial regulations.

Potential EPA Waste Codes: If discarded, this product is considered a RCRA ignitable waste, D001.

Components Subject to USEPA Land Disposal Restrictions:

n-Butyl alcohol	78-92-2	10.74 %
Isobutyl alcohol	78-83-1	5.98 %
Ethyl benzene	100-41-4	4.00 %
Toluene	108-88-3	0.2 %

XIV. TRANSPORTATION INFORMATION

DOT Paint, 3, UN 1263, II
See 49CFR 172.101 for Special Provisions, Packaging, and Quantity Limitations.

XV. REGULATORY INFORMATION

Chemical Name	Regulation	CASRN	%
sec-Butyl alcohol	SARA 313 Reportable:	78-92-2	10.74
m-Xylene	SARA 313 Reportable:	108-38-3	10.52
o-Xylene	SARA 313 Reportable:	95-47-6	4.33
Ethyl benzene	SARA 313 Reportable:	100-41-4	4.00
p-Xylene	SARA 313 Reportable:	106-42-3	2.68
Toluene	SARA 313 Reportable:	108-88-3	0.2
Isopropyl alcohol	SARA 313 Reportable:	67-63-0	0.07
Formaldehyde	SARA 313 Reportable:	50-00-0	0.06
1,2,4-Trimethylbenzene	SARA 313 Reportable:	95-63-6	0.00
Benzene	SARA 313 Reportable:	71-43-2	0.00
Formaldehyde	Extremely Haz. Substances:	50-00-0	0.06
TPQ = 500 pounds; RQ = 100 pounds (does not meet toxicity criteria but because of high production volume and recognized toxicity is considered a chemical of concern)	SARA Threshold Planning Quantity:	50-00-0	0.06
Benzene, ethyl-	California Proposition 65 Cancer List:	100-41-4	4.00
Formaldehyde (gas)	California Proposition 65 Cancer List:	50-00-0	0.06
Benzene	California Proposition 65 Cancer List:	71-43-2	0.00
Quartz	California Proposition 65 Cancer List:	14808-60-7	0.00

Ethyl alcohol	California Proposition 65 Developmental Toxicity:	64-17-5	1.33
Toluene	California Proposition 65 Developmental Toxicity:	108-88-3	0.2
Benzene	California Proposition 65 Developmental Toxicity:	71-43-2	0.00
Benzene	California Proposition 65 Reproductive - Female:	71-43-2	0.00
alkyd resin solids	New Jersey Right To Know:	PROPRIETARY	27.66
butanol	New Jersey Right To Know:	78-92-2	10.74
m-xylene	New Jersey Right To Know:	108-38-3	10.52
n-butyl acetate	New Jersey Right To Know:	123-86-4	7.79
isobutanol	New Jersey Right To Know:	78-83-1	5.98

XVI. ADDITIONAL INFORMATION

Other Information:

IMPORTANT: WHILE THE DESCRIPTIONS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU PERFORM AN ASSESSMENT TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED, DATA OR INFORMATION SET FORTH. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, OR DATA PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, THE DESCRIPTIONS, DATA AND INFORMATION FURNISHED HEREUNDER ARE GIVEN GRATIS. NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DATA AND INFORMATION GIVEN ARE ASSUMED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

MSDS glossary.