SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: Crystal Clear
Product Use: Maximum Protection Coating
Manufactured for: Visual Pollution Technology
P.O. Box 12833
Scottsdale, AZ 85267-2833

Product Identification # (PIF): 01090
Emergency Telephone #: 1-800-255-3924 ChemTel
General Information #: 480-657-9183
Date Prepared: June 13, 2005
Date Revised: May 6, 2016

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification

Signal Word: WARNING

Hazard Class	Category	Code	Hazard Statement
Flammable liquid and vapor	3	H226	Flammable Liquid
Harmful if swallowed	4	H302	Acute Oral Toxicity
Harmful in contact with skin	4	H312	Acute Dermal Toxicity
Causes skin irritation	2	H315	Skin Irritation
May cause an allergic skin reaction	1	H317	Skin Sensitization
Causes serious eye irritation	2A	H319	Eye Irritation
Harmful if inhaled	4	H332	Acute Toxicity, Inhalation
May cause respiratory irritation	3	H335	STOT: Single Exposure, Respiratory Tract Irritation
May cause drowsiness or dizziness	3	H336	STOT, Single Exposure; Narcotic effects
Suspected of damaging fertility or the unborn child	2	H361	Reproductive Toxicity
May cause damage to organs	2	H371	STOT, Single Exposure
Toxic to aquatic life with long-lasting effects	2	H411	Hazardous to the Aquatic Environment, Long-term

Precautionary Measures:

Category	Code	Statement
Prevention	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 equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe fumes/gas/mist/vapors/spray.
	P264	Wash thoroughly after handling.
	P270	Do not eat, drink or smoke or smoke when using this product.
	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/eye protection/face protection.
	P281	Use personal protective equipment as required.
Response	P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P330	Rinse mouth.
	P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
	P352	Wash with soap and water.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P322	Specific measures: See Section 4 First Aid Measures.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P321	Specific treatments: See Section 4 First Aid Measures.
	P362	Take off contaminated clothing and wash before reuse.
	P304+P340	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+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P309+P31	IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
	P370+P378	In case of fire: Use Foam, dry chemical, carbon dioxide fire extinguishers, water spray for extinction.
	P391	Collect spillage.
Storage	P403+P233+P235	Store in a well ventilated place. Keep container tightly closed. Keep Cool.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations.

Hazards not otherwise classified: Prolonged/repeated skin contact may cause skin drying (dermatitis). Can be absorbed by skin.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Common Name	CAS #	Concentration Range %
Homopolymer of hexamethylene diisocyanate	Non known	28182-81-2	47 - 51
1-Methoxy 2-Propanol Acetate	Glycol ether PM acetate	108-65-6	38 – 42
Light Aromatic Naphtha	Aromatic 100	64742-95-6	8 – 12

SECTION 4. FIRST AID MEASURES

Eyes: Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention if irritation persists.
Skin or Hair: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash with soap and water. Launder clothing before reuse. Call a POISON CENTER or doctor/physician if you feel unwell. If irritation or rash develops, seek medical attention. Contaminated work clothing should not be allowed out of the workplace.
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.
Ingestion: DO NOT INDUCE VOMITING. Call a physician immediately. Rinse out mouth. If professional advice is not available, give two glasses of water to drink. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. The symptoms of chemical pneumonitis may not show up for a few days.

SECTION 5. FIRE-FIGHTING MEASURES

Flammability: Class II Combustible liquid
Flash Point: 108ºF (42ºC)
Extinguishing Media: Foam, dry chemical, carbon dioxide fire extinguishers. Do not spray water directly on fire. Use water spray to cool containers.
Specific hazards arising from chemical: Vapors are heavier than air and may travel along the ground to an ignition source. Readily ignited by static discharge. Closed containers may explode if exposed to extreme heat.
Hazardous combustion products: Oxides of carbon and nitrogen, hydrogen cyanide, isocyanate, isocyanic acid.
Firefighting protective equipment: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.
Sensitivity to static discharge: This product is combustible and readily ignited even by static discharge. Grounding equipment is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required (Section 8). Keep away from heat/sparks/open flames/hot surfaces – No smoking. Ventilate area. Do not breathe fumes/mists/vapors/sprays. Do not eat, drink or smoke in work areas. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
For Small Spills: Spilled material may be slippery. Avoid release to the environment – collect spillage. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Vapor-suppressing foam may be used to reduce vapors. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste with non-sparking tools. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.
For Large Spills: Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required (Section 8). Use only outdoors or in a well-ventilated area. Use with adequate ventilation. Do not breathe fumes/mists/vapors/sprays. Keep away from heat/sparks/open flames/hot surfaces – No smoking. Use proper bonding and grounding during product transfer as described in document NFPA 77. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharge. Vapors are heavier than air and may travel along the ground to an ignition source. Avoid release to the environment – collect spillage. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively. Avoid dust formation. Do not premix with other chemicals. Empty containers may contain residue and can be dangerous. Do not eat, drink or smoke in work areas. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Storage: Keep away from heat, flame, or sunlight – Keep cool. Keep from freezing. Keep container tightly closed when not in use. Store locked up. Store in a well-ventilated place. Protect from physical damage. Store away from strong oxidizing agents, strong acids, strong bases, copper alloys, alcohols, water.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
Homopolymer of hexamethylene diisocyanate	28182-81-2	Not established	0.005 ppm	Not established
1-Methoxy 2-Propanol Acetate	108-65-6	Not established	Not established	Not established
Light Aromatic Naphtha	64742-95-6	100 ppm	25 ppm	Not determined

Engineering Controls: Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum.
Personal protective equipment:

Eye: Safety glasses with side shields or splash proof goggles. Use a face shield when handling large amounts.
Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing. Boots. Wear apron if handling large amounts.
Respirator: Use NIOSH approved protection with organic vapor cartridge if PEL is exceeded, if vapors are causing

irritation, or if mists/spays are generated.
Other: Use only in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Acetate	Vapor pressure	2.5 mm of Hg
Odor threshold	Not determined	Vapor density (Air = 1)	>1
pH	Not applicable	Relative Density (water = 1.0)	1.035 g/ml
Melting point	Not determined	Solubility	Insoluble in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	108ºF (42ºC)	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity, #2 Zahn	19 – 21 seconds
Flammability	Class II Combustible	VOC by weight	50%

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions. Reacts violently with strong oxidants and strong acids, causing fire and explosion hazards. Attacks many plastics and coatings.
Chemical stability: Stable under normal, ambient temperature and conditions.
Possibility of hazardous reactions: Hazardous polymerization will not occur.
Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals
Incompatible materials: Avoid strong oxidizing agents, strong acids, strong bases, copper alloys, alcohols, water.
Hazardous combustion products: Oxides of carbon and nitrogen, hydrogen cyanide, isocyanate, isocyanic acid.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:

Oral (LD50 Rat): >2000mg/kg
Dermal (LD50 Rat): 2000 mg/kg
Inhalation (LC50 Rat): 0.554 mg/l (4hr - Homopolymer of hexamethylene diisocyanate)

Skin corrosion/irritation: Skin irritant. Symptoms may include skin reddening, swelling and itching. Prolonged/repeated skin exposures can result in dermatitis. Absorption through skin increases exposure.
Serious eye damage/irritation: Serious eye irritant – vapor and liquid. Symptoms may include a burning sensation, tearing, swelling and redness. May cause temporary corneal injury.
Respiratory or skin sensitization: Causes irritation to respiratory tract. Symptoms may include coughing, a burning sensation of nose and throat and difficulty breathing. Vapors harmful – overexposure can cause harm to kidneys, blood, nerves, liver and lungs. May cause an allergic skin reaction.
Germ cell mutagenicity: No data available
Carcinocenicity: NTP/IARC/OSHA Carcinogen: Xylenes #1330-20-7 – IARC Group 3, Cumene #98-82-8 – IARC Group 2B, Toluene #108-88-3 – IARC Group 3.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.
STOT-single exposure: Respiratory Tract Irritation. May cause drowsiness or dizziness. May cause damage to organs.
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified
Ingestion: Harmful or fatal if swallowed. Swallowing can cause abdominal irritaion, nausea, vomiting and diarrhea. The symptoms of chemical pneumonitis may not show up for a few days.
Corrosive to digestive tract. May cause severe pain, burning, vomiting and diarrhea. Lung aspiration may result in chemical pneumonitis, pulmonary edema, damage to lung tissue, and in extreme cases death.
Likely routes of exposure: Eyes, skin and inhalation
Interactive effects: Use of alcoholic beverages enhances acute overexposure effects of harm to kidneys, blood, nerves, liver and lungs. Persons with skin, respiratory, liver or kidney problems should avoid use.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

96h LC-50 (fish): <10 mg/L
96h EC-50 (invertebrates): <10 mg/L
48h LC-50 (algae): <10 mg/L

Persistence and degradability: Not biodegradable.
Bioaccumulative potential: May occur.
Mobility in soil: This material is a mobile liquid. This product floats on water. This product is volatile and may spread in the atmosphere.
Other adverse effects: Toxic to aquatic life with long-lasting effects – Avoid release to the environment. Collect spillage.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Toxic to aquatic life – avoid release to the environment and collect spillage.
Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable), U239 (Xylenes), U055 (Cumene) and U220 (Toluene) (40 CFR 261.22).

SECTION 14. TRANSPORT INFORMATION

United States DOT:

Container of 119 gallons or less:

Combustible Liquid (49 CFR 173:120(b)(2): This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less for ground transportation. Exception CFR 173.150(f)(2): Combustible liquids. This exception does not apply to transportation by vessel or aircraft.

Container of 120 gallons or more:

UN/ID No.: UN1993
Proper Shipping Name: Flammable Liquids, n.o.s., (Light Aromatic Naphtha, 1-Methoxy 2-Propanol Acetate)
Hazard Class: 3
Packing Group: III

IATA and IMDG:

UN/ID No.: UN1993
Proper Shipping Name: Flammable Liquids, n.o.s., (Light Aromatic Naphtha, 1-Methoxy 2-Propanol Acetate)
Hazard Class: 3
Packing Group: III
Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101).
Toxic to aquatic life with long-lasting effects.
Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.
SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.
SARA TITLE III Section 311/312:

Immediate (Acute) Health	Yes	Fire Hazard	Yes
Delayed (Chronic) Health	No	Reactive Hazard	No

SARA Title 313: This material contains the following chemical components with known CAS numbers subject to reporting requirements (40 CFR 372): Xylenes CAS# 1330-20-7, % by wt. = 0 - 2.5%, Cumene #98-82-8, % by wt. = 0 – 2.5% and Toluene #108-88-3, % by wt. = 0 – 2.5%.
CERCLA: Xylenes CAS# 1330-20-7 has a reportable quantity of 100 lbs., Cumene #98-82-8 has a RQ of 5,000 lbs, and Toluene #108-88-3 has a RQ of 1,000 lbs. at 100% concentration, however, this product is NOT considered a Hazardous Substance since the quantity does not equal or exceed the RQ in one package (49 CFR 171.8, definition of "Hazardous Substance").
United States Right-To-Know: Homopolymer of hexamethylene diisocyanate CAS #28182-81-2 – Massachusetts, New Jersey, Pennsylvania. 1,2,4-Trimethylbenzene #526-73-8 – New Jersey and Pennsylvania. Cumene #98-82-8 – New Jersey and Pennsylvania. Xylene #1330-20-7 – New Jersey and Pennsylvania. Toluene #71-43-2 – New Jersey and Pennsylvania.
Proposition 65: This material contains the following ingredients for which the state of California has found to cause cancer, birth defects or other reproductive harm: Toluene #108-88-3.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable), U239 (Xylenes), U055 (Cumene) and U220 (Toluene) (40 CFR 261.22).

SECTION 16. OTHER INFORMATION

Date Prepared: May 6, 2016 – SDS updated to meet revision #5 GHS requirements.
Hazard Ratings (HMIS): Health 2, Flammability 2, Reactivity 0 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.
Carefully read all instructions on label before handling this product.
Keep out of reach of children.
"FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value

TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.
Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.
SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.