[According to OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200]

SECTION 1. IDENTIFICATION

PRODUCT INFORMATION

TRADE NAME : WB 20 SHEEN CLEAR MODIFIED URETHANE
FORMULA : MOD-0020
HMIS NUMBER : 1-1-0
CHEMICAL NAME : ACRYLIC DISPERSION
CHEMICAL FAMILY : ORGANIC COMPOUND
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.

SUPPLIER INFORMATION

MANUFACTURER FOR :

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

EMERGENCY PHONE : 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

SECTION 2. HAZARD(S) IDENTIFICATION

GHS CLASSIFICATION

Not classified

OSHA/HCS STATUS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

HAZARD PICTOGRAMS:

HAZARD STATEMENTS: No known significant effects or critical hazards.

Hazardous Material Information System (U.S.A.)	**Health**	**1**
	Flammability	**1**
	Physical Hazards	**0**

SECTION 2. HAZARD(S) IDENTIFICATION

PRECAUTIONARY STATEMENTS:

Prevention :	Not applicable.
Response :	Not applicable.
Storage :	Not applicable
Supplemental label elements:	Avoid contact with skin and clothing. Wash thoroughly after handling.
Hazards not otherwise classified:	Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT DESCRIPTION	CAS NUMBER	PERCENT BY WGT
2-BUTOXYETHANOL	111-76-2	1.0
GLYCOL ETHER DB	112-34-5	1.6
mETHYL PYRROLIDONE	872-50-4	6.2

"X" Indicates substance is a HAP,reportable under SARA III, Section 313, if 10,000 lbs of an item used per calendar year.
Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4. FIRST AID MEASURES

FIRST-AID INSTRUCTIONS

SKIN CONTACT	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
EYE CONTACT	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
INHALATION	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
INGESTION	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directe to do so by medical personnel. Get medical attention if symptoms occur.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND CHRONIC

Potential acute health effects

Eye contact:	No known significant effects or critical hazards.
Inhalation :	No known significant effects or critical hazards.
Ingestion :	No known significant effects or critical hazards.
Skin contact :	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	No specific data
Inhalation	No specific data.
Ingestion	No specific data.

SECTION 4. FIRST AID MEASURES

Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking

RECOMMENDATIONS FOR IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

SECTION 5. FIRE-FIGHTING MEASURES

FLASH POINT OVER 200 TCC N/R
LEL N/A
UEL N/A

EXTINGUISHING MEDIA: Foam, C02, dry chemical, water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
The material will not support combustion unless the water has evaporated.

SPECIAL FIREFIGHTING PROCEDURES:
Water may be used to cool closed containers, to prevent pressure build up.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Container may burn or leak in heat of fire. Burning will produce toxic fumes. Burning will produce hazardous compounds including oxides of: carbon, nitrogen.

ADVICE FOR FIREFIGHTERS:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind.Prevent entry into sewers, water courses, basements or confined areas. Wash spillagesinto an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal

SECTION 6. ACCIDENTAL RELEASE MEASURES

according to local regulations (see Section 13). Dispose of via a licensed waste

disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Protective measures: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled,stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area,away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container,protected from direct sunlight.

PRECAUTIONS TO BE TAKEN: KEEP FROM FREEZING.

Protect drums against physical damage.

Do not take internally. Wash hands thoroughly after handling.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

INGREDIENT DESCRIPTION	CAS NUMBER	EXPOSURE LIMITS	
2-BUTOXYETHANOL	111-76-2	ACGIH TLV:	20.00 PPM-TWA
		OSHA PEL:	50.00 PPM
GLYCOL ETHER DB	112-34-5	ACGIH TLV:	20.00 PPM
		OSHA PEL:	50.00 PPM
mETHYL PYRROLIDONE	872-50-4	ACGIH TLV:	10.00 PPM
		OSHA PEL:	

EXPOSURE CONTROLS

ENGINEERING CONTROLS:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PRECAUTIONS:

SKIN PROTECTION:
Long sleeves and pants to avoid skin contact

HAND PROTECTION:
Gloves.

EYE PROTECTION:
Splash goggles/face shield.

RESPIRATORY PROTECTION:
Vapor respirator.A respirator protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever work place conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

OTHER PROTECTIVE EQUIPMENT:
Ensure that eyewash stations and safety showers are proximal to the work-station location.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT	OVER 200 TCC N/R	MELTING POINT: N/A
LEL	: 1%	EVAPORATION RATE: N/A
UEL	: N/D	FLAMMABILITY (solid, gas): N/A
APPEARANCE	: CLEAR IN COLOR	PARTITION COEFFICIENT: N/A
ODOR	: N/A	ODOR THRESHHOLD: N/A
BOILING POINT	: 100 (deg F)	% SOLIDS (+/-2) WGT: 33.759
VAPOR PRESSURE	: 1.00 (mmHg)	% SOLIDS (+/-2) VOL: 28.519
VAPOR DENSITY	: 4.0 (AIR = 1)	VOC (LB/GL) AS SUPPLIED: .49
WATER SOLUBLE	: Y	VOC (g/L) AS SUPPLIED: 58.82
		VOC (LB/GL) AS APPLIED: .204
RELATIVE DENSITY (WEIGHT/GALLON)	: 8.64	VOC (g/L) AS APPLIED: 24.43
		VOC (LB/GL) SANS WATER: .20
		VOC (g/L) SANS WATER: 24.43
PH (range)	: 8.0 TO 9.0	
SOLUBILITY	: PARTTIALLY SOLUBLE IN HOT/COLD WATER	
AUTO IGNITION TEMPERATURE	: N/A	
DECOMPOSITION TEMPERATURE	: N/A	
VISCOSITY	: SEE PRODUCT DATA SHEET	

Density, %solids and %VOC analysis reference method 24
VOC IS LESS ANY FEDERALLY EXEMPT SOLVENT

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY:

No specific test data related to reactivity available for this product or its ingredients.

CHEMICAL STABILITY

Stable.

HAZARDOUS DECOMPOSITION PRODUCTS:

Under normal conditions of storage and use, hazardous reactions will not occur.

INCOMPATIBILITY (MATERIALS TO AVOID) :

No specific data

HAZARDOUS POLYMERIZATION:

Will not occur.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID:

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

INGREDIENT DESCRIPTION	CAS NUMBER	TOXICOLOGICAL DATA
2-BUTOXYETHANOL	111-76-2	LC50: (RAT):3h >4.9mg/l LD50: Oral (Rat): 1,300 mg LC50:Dermal Rat 2000mg/kg
GLYCOL ETHER DB	112-34-5	LD50: 4500-9625 mg/kg (rat) Oral Dermal LD50:>2765 mg/kg (rabbit)
mETHYL PYRROLIDONE	872-50-4	LD50: 3914 mg/kg (rat) Oral Dermal LD50 8000 mg/kg (rabbit)

TARGET ORGANS:
This product may cause eye, skin and respiratory tract irritation.

EFFECTS OF EXCESSIVE OVEREXPOSURE:

Intentionally and deliberately concentrating and inhaling the contents may be harmfuL.
Wear an appropriate, properly fitted respirator (NIOSH/MSHA APPROVED) before and during application unless air monitoring demonstrates vapor/mist levels are below applicable limits.

EFFECTS OF OVEREXPOSURE:

INHALATION	Vapor or mist can cause headache, nausea, and irritation of the nose, throat, and lungs. Overexposure can have narcotic effect
EYE CONTACT	Slightly irritating to eyes.
SKIN CONTACT	Irritating to skin upon repeated or prolonged contact.

PRIMARY ROUTES OF ENTRY:
Dermal, Inhalation, Ingestion.

CARCINOGENICITY:

Substances have not been identified as a carcinogen or probable carcinogen by NTP, IARC, OSHA, EU, ACGIH or CPSC.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

ECO-TOXICITY:
Persistence and degradability: Not available

MOBILITY IN SOIL

Soil/water partition coefficient (KOC): Not available.

SECTION 12. ECOLOGICAL INFORMATION

Other adverse effects : No known significant effects or critical hazards.

ADDITIONAL INFORMATION

2-(2-BUTOXYETHOXY)ETHANOL

Toxicity

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity

LC50, bluegill (Lepomis macrochirus), 96 h: 1,300 mg/l
LC50, golden orfe (Leuciscus idus), static, 48 h: 2,250 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, water flea Daphnia magna, 24 h, immobilization: 3,200 mg/l
LC50, water flea Daphnia magna, 24 h: 2,850 mg/l

Toxicity to Micro-organisms

EC50; bacteria, Growth inhibition: 255 mg/l

Persistence and degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
3.62E-11 cm3/s	11 h	Estimated.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
89 - 93 %	28 d	OECD 301C Test
100 %	28 d	OECD 302B Test

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
27 %	60 %	81 %	

Theoretical Oxygen Demand: 2.17 mg/mg

2-BUTOXYETHANOL

Toxicity

Acute toxicity

Fish

Product: LC-50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l

Aquatic Invertebrates

Product: EC-50 (Water Flea, 48 h): 1,550 mg/l

Chronic Toxicity

Fish

Product: NOEC (Zebra Fish, 21 d): > 100 mg/l

Aquatic Invertebrates

Product: NOEC (daphnid, 21 d): 100 mg/l

Toxicity to Aquatic Plants

Product: EC-50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1,840 mg/l

Persistence and Degradability

Biodegradation

Product: 90.4 % (28 d) Readily biodegradable

Biological Oxygen Demand:

Product No data available.

Specified substance(s)

2-butoxyethanol No data available.

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

2-butoxyethanol No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

2-butoxyethanol No data available.

Bioaccumulative Potential

Product: Potential to bioaccumulate is low.

Mobility in Soil:

Expected to partition to water.

Results of PBT and vPvB assessment: Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria

Not fulfilling vPvB
(very persistent, very bioaccumulative) criteria.

Other Adverse Effects: No data available.

SECTION 12. ECOLOGICAL INFORMATION

N-methyl-2-pyrrolidone (NMP)

7 Information on toxicological effects
7 Acute toxicity:
7 LD/LC50 values that are relevant for classification:

Oral	LD50	3914 mg/kg (rat)
Dermal	LD50	8000 mg/kg (rabbit)

7 Primary irritant effect:
7 on the skin: Irritant to skin and mucous membranes.
7 on the eye: Irritating effect.
7 Sensitization: No sensitizing effects known.
7 Additional toxicological information:
7 Carcinogenic categories
7 IARC (International Agency for Research on Cancer) Substance is not listed.
7 NTP (National Toxicology Program) Substance is not listed

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way.

SECTION 14. TRANSPORT INFORMATION

	DOT	TDG	Mexico	ADR/RID	IMDG	IATA
UN NUMBER	**Not regul.**	**Not regul.**	**Not regul.**	**Not regul.**	**Not regul.**	**Not regul.**
UN PROPER SHIPPING NAME	-	-	-	-	-	-
TRANSPORT HAZARD CLASS	-	-	-	-	-	-
PACKAGING GROUP	-	-	-	-	-	-
SPECIAL PRECAUTIONS	**No**	**No**	**No**	**No**	**No**	**No**

SECTION 15. REGULATORY INFORMATION

TSCA : LISTED
DSL/NDSL: LISTED

SECTION 313 SUPPLIER NOTIFICATION:
This product contains the following chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

CHEMICAL NAME	CAS NUMBER	PERCENT BY WEIGHT
mETHYL PYRROLIDONE	872-50-4	6.23

CALIFORNIA PROP. 65:
This product contains the following ingredients for which the State of California has found to cause cancer, which would require a warning under the statute:

CHEMICAL NAME	CAS NUMBER
NONE KNOWN	

SECTION 16. OTHER INFORMATION

OTHER PRECAUTIONS

PRECAUTIONS TO BE TAKEN: KEEP FROM FREEZING.
Protect drums against physical damage.
Do not take internally. Wash hands thoroughly after handling.