Material Safety Data Sheet Set
GlossTek™ 400
Parts A-B-C

GLOSSTEK™ 400
PART A

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Aliphatic polyisocyanate curing agent
PRODUCT DESCRIPTION: Colorless to pale yellow liquid, practically odorless

MANUFACTURER'S NAME
JFB Hart Coatings, Inc.

ADDRESS
10210 Werch Drive, Suite 203
Woodbridge, IL 60517

DATE PREPARED: May 12, 2014
SUPERSEDES: July 21, 2010

TELEPHONE NUMBER FOR INFORMATION
(630) 633-6228

EMERGENCY TELEPHONE NUMBER
Infotrac (800) 535-5053 Outside USA (352) 323-3500

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview: Colorless to pale yellow liquid, nearly odorless. Causes eye irritation. May cause skin and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled or swallowed. May cause lung damage. As a result of previous overexposures by inhalation, or a single large dose, certain individuals may develop isocyanate sensitization which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Prolonged skin contact can cause skin sensitization. Individuals who have developed skin sensitization can develop symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Toxic gases are emitted during burning or thermal decomposition.

Potential Health Effects

EYE: Contact causes irritation which may be severe and include pain associated with redness, tearing, stinging, and swelling of the conjunctiva. Vapor may cause irritation with symptoms such as burning and tearing.

SKIN: Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, itching, swelling and possible necrosis. Chronic exposure may result in skin sensitization, which can cause symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Cured material is hard to remove.

INGESTION: May be harmful if swallowed; may cause headache, dizziness, diarrhea and general weakness.

INHALATION: High concentrations are irritating to the respiratory tract; may cause runny nose, sore throat, coughing, chest discomfort, shortness of breath and difficulty breathing. May also cause headache, dizziness, nausea, vomiting and malaise. Chronic overexposures, or a single large dose, may cause isocyanate sensitization and subsequent reaction to a later exposure to isocyanate at levels well below the TLV. These symptoms, which may include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Chronic overexposure to diisocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent.

Chronic Effects / Carcinogenicity
NTP Listed: No IARC Group 1 or 2A: No OSHA Regulated: No

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Registry No.	Percentage (wt/wt)
Homopolymer of hexamethylene diisocyanate	28182-81-2	> 95
Hexamethylene diisocyanate (a)	822-06-0	< 0.15

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

(a) Monomer content is less than 0.015% based on resin solids at the time of manufacture.

MATERIAL SAFETY DATA SHEET

SECTION 4 – FIRST AID MEASURES

EYE:	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
SKIN:	Remove contaminated clothing; wash affected area with soap and water for at least 5 minutes; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
INGESTION:	DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Never give anything by mouth to an unconscious person; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.
INHALATION:	Remove affected person to fresh air. Provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:	Carbon dioxide, water fog, dry chemical, chemical foam
MEDIA NOT TO BE USED:	Water stream
FIRE & EXPLOSION HAZARDS:	Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface.
FIRE FIGHTING INSTRUCTIONS:	Firefighters must wear full facepiece self-contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire-exposed containers cool.
HAZARDOUS DECOMPOSTION PRODUCTS:	Smoke, fumes, oxides of carbon and nitrogen.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CAUTION – WILL SUPPORT COMBUSTION. Remove ignition sources. Put on protective equipment. Do not wash to sanitary sewer. All spills – confine, soak up with approved absorbent (Kitty Litter, Oil-Dri®, etc.), saturate absorbent material with neutralization solution and mix. Wait 15 minutes. Collect material into approved open head metal containers for disposal. Flush area with water; recover flush for proper disposal.

Neutralization solutions:
1-a mixture of 75% water, 20% non-ionic surfactant and 5% n-propanol; or
2-a mixture of 80% water, 20% non-ionic surfactant; or
3-a mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent; or
4-a mixture of 50% isopropanol, 45% water and 5% concentrated ammonia solution (by weight).

SECTION 7 – HANDLING AND STORAGE

HANDLING	Keep away from food and drink. Wash hands before eating. Do not breathe vapors or mist. Wear respiratory equipment if material is heated, sprayed, or used in a confined space. Warning properties such as irritation of eyes, nose or throat are not adequate to prevent overexposure from inhalation.
STORAGE	Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures or open flames. Keep this and other chemicals out of reach of children. CAUTION – WILL SUPPORT COMBUSTION. Store below 104 °F (40 °C).

MATERIAL SAFETY DATA SHEET

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS	The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment. See below for component exposure guidelines.
RESPIRATORY PROTECTION	Use NIOSH approved respirator for use in isocyanate-containing environments, if TWA exceeds limits or are unknown. Refer to 29 CFR 1910.134, CSA Z94.4-93, or European Standard EN 149 for complete regulations. None required while threshold limits are measured and are kept below maximum allowable concentrations.
SKIN PROTECTION	Protective gloves of neoprene, nitrile rubber or butyl rubber with cuffs.
EYE PROTECTION	Goggles with side shields. Refer to 29 CFR 1910.133, CSA Z94.3-M1982, or European Standard EN166.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	Safety eyebath nearby. Coveralls, apron, or other equipment should be worn to minimize skin contact.

EXPOSURE GUIDELINES	OSHA PEL		ACGIH TWA	
	ppm	mg/m3	ppm	mg/m3
Homopolymer of hexamethylene diisocyanate*	-	-	-	0.5
Hexamethylene diisocyanate	0.005	-	0.005	-

** A TLV or PEL have not been established for this component. The manufacturer has established the limit indicated here as a guideline.*

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Yellow liquid
ODOR	Practically odorless
BOILING POINT	Decomposes
FREEZING POINT	Not measured
VAPOR PRESSURE	< 5.2 10^{-9} mm Hg @ 20 °C
SOLUBILITY IN WATER	Insoluble
SPECIFIC GRAVITY	1.160
pH	Not applicable
VOLATILE ORGANIC COMPOUNDS	0 g/l
VISCOSITY	Approximately 3000 mPa.s @ 74 °F (23.3 °C)
FLASH POINT [METHOD]	330 °F (160 °C) [DIN EN 22719]
FLAMMABLE LIMITS	LEL: Not determined UEL: Not determined

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	Stable
MATERIALS TO AVOID	Water, amines, strong bases, alcohols, copper alloys
CONDITIONS TO AVOID	Extreme temperatures; open flames
HAZARDOUS DECOMPOSITION PRODUCTS	Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon and nitrogen, hydrogen cyanide, HDI, hydrocarbons, fumes, and smoke may be produced.
HAZARDOUS POLYMERIZATION	May occur. Avoid contact with moisture.

MATERIAL SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION

Component	LD50 Oral (rat)	LD50 Dermal (rabbit)	LC50 Inhalation (rat)
Homopolymer of hexamethylene diisocyanate	> 5000 mg/kg	> 5000 mg/kg	390-453 mg/m^3 / 4H
Hexamethylene diisocyanate	710 mg/kg	Not available	275 mg/m^3

SECTION 12 – ECOLOGICAL INFORMATION

Not readily biodegradable.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with Local, State, and Federal Regulations; this product may produce concentrated hazardous vapors of fumes in a disposal container creating a dangerous environment. Consult your local, state, Provincial or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

SECTION 14 – TRANSPORT INFORMATION

US DOT — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

IATA — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

IMDG — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories

Acute health; chronic health

313 Reportable Ingredients:

Hexamethylene diisocyanate

MATERIAL SAFETY DATA SHEET

CERCLA (Comprehensive Response Compensation and Liability Act)
Hexamethylene diisocyanate – RQ = 100 lbs (45.4 kg)
Spill equivalence of 24,000 lbs of this product.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CANADA
CPR (Canadian Controlled Products Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: D2A.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)
Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

EUROPE
EINECS (European Inventory of Existing Commercial Chemical Substances)
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EU CLASSIFICATION ACCORDING TO DIRECTIVE 67/548/EEC AND DIRECTIVE 199/45/EC
Xn; R42 – Xi; R36/37/38 – R43

Risk Phrases
R36/37/38 – Irritating to eyes, respiratory system and skin
R42/43 – May cause sensitization by inhalation and skin contact.

Safety Phrases
S23 – Do not breathe vapor.
S26 – In cause of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S 45 – In case of accident of if you feel unwell, seek medical advice immediately (show the label whenever possible).

GLOSSTEK™ 400
PART A

MATERIAL SAFETY DATA SHEET

SECTION 16 – OTHER INFORMATION

HMIS HAZARD RATINGS	
Health	2*
Flammability	1
Physical hazard	0
Personal Protection	

HMIS SYSTEM

0 = Insignificant hazard
1 = Slight
2 = Moderate
3 = High
4 = Extreme
* = Chronic health hazard

MSDS Changes: Revised format. Section 2, 3, 6, 7, 8, 9, 11, 15.
For information about this MSDS, contact Regulatory Affairs: (903) 454-8981

GLOSSTEK™ 400
PART B

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Polyester Polyol Resin
PRODUCT DESCRIPTION: Milky liquid, slightly sweet odor

MANUFACTURER'S NAME
JFB Hart Coatings, Inc.

ADDRESS
10210 Werch Drive, Suite 203
Woodbridge, IL 60517

DATE PREPARED: May 5, 2014
SUPERSEDES: May 5, 2011

TELEPHONE NUMBER FOR INFORMATION
(630) 633-6228

EMERGENCY TELEPHONE NUMBER
Infotrac (800) 535-5053 Outside USA (352) 323-3500

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview: Milky liquid, ingestion may cause gastric distress. Skin and eye irritant.

Potential Health Effects

EYE:	Contact causes severe irritation and pain associated with redness, tearing, stinging, and swelling of the conjunctiva
SKIN:	Contact may cause moderate reddening, itching, swelling and possible severe irritation.
INGESTION:	May cause gastric distress, vomiting and diarrhea.
INHALATION:	None expected; however, certain individuals may be sensitized and experience minor nausea or headaches. Breathing airborne particles of dust from mixing, spaying, sanding, grinding, etc.; may cause irritation to respiratory tract.

Chronic Effects / Carcinogenicity
NTP Listed: No IARC Group 1 or 2A: No OSHA Regulated: No

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Registry No.	Percentage (wt/wt)
Alkanol polyalkoxypolyamine (a)	Proprietary	1 – 5
Dipropylene glycol methyl ether	34590-94-8	1 – 5
Non-Hazardous Ingredients		
Polyester polyol resin	Proprietary	40 – 50

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

(a) See section 15

SECTION 4 – FIRST AID MEASURES

EYE:	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
SKIN:	Remove contaminated clothing; wash affected area with soap and water for 15 minutes; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
INGESTION:	DO NOT induce vomiting unless directed to do so by medical personnel; never give anything by mouth to an unconscious person; seek medical attention.
INHALATION:	Remove affected person to fresh air; if symptoms persist seek medical attention.

MATERIAL SAFETY DATA SHEET

SECTION 5 – FIRE FIGHTING MEASURES

Product is not considered flammable or combustible.

EXTINGUISHING MEDIA:	Carbon dioxide, water, water fog, dry chemical, chemical foam
MEDIA NOT TO BE USED:	None known
FIRE & EXPLOSION HAZARDS:	None
FIRE FIGHTING INSTRUCTIONS:	Keep containers cool with water spray to prevent container rupture due to pressure buildup; floor will become slippery if material is released.
HAZARDOUS DECOMPOSTION PRODUCTS:	Smoke, fumes, oxides of carbon and nitrogen.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Shut off source of leak if safe to do so. Dike and contain product. Confine spill; soak up with clay, sand or other approved absorbent; shovel product into approved container for disposal. Wash area with plenty of water.

SECTION 7 – HANDLING AND STORAGE

HANDLING	Keep away from food and drink. Wash hands before eating.
STORAGE	Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS	The use of local exhaust ventilation is recommended. No other special controls are indicated.
RESPIRATORY PROTECTION	NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134, CSA Z94.4-93, or European Standard EN 149 for complete regulations.
SKIN PROTECTION	Protective gloves are recommended.
EYE PROTECTION	Goggles with side shields. Refer to 29 CFR 1910.133, CSA Z94.3-M1982, or European Standard EN166.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	Safety eyebath nearby.

EXPOSURE GUIDELINES	OSHA PEL		ACGIH TLV	ACGIH STEL
	ppm	mg/m3	ppm	ppm
Dipropylene glycol methyl ether*	100	600	100	150

**Skin notation: There is potential contribution to the overall exposure via the skin route including mucous membranes and the eyes, by contact with vapors, liquid and solids.*

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Milky liquid

MATERIAL SAFETY DATA SHEET

ODOR	Slightly sweet odor
BOILING POINT	214 °F (101° C)
FREEZING POINT	32 °F (0° C)
VAPOR PRESSURE	17 mm Hg @ 20 ° C
SOLUBILITY IN WATER	Dispersible
SPECIFIC GRAVITY	1.059
pH	9.0 – 11.0
VOLATILE ORGANIC COMPOUNDS	14 g/l
VISCOSITY	Not determined
FLASH POINT [METHOD]	Does not flash
FLAMMABLE LIMITS	LEL: Not applicable UEL: Not applicable

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	Stable
MATERIALS TO AVOID	Strong oxidizers, strong acids
CONDITIONS TO AVOID	Extreme temperatures
HAZARDOUS DECOMPOSITION PRODUCTS	Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, nitrogen compounds including hydrogen cyanide, fumes, and smoke may be produced.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Component	LD50 Oral (rat)	LD50 Dermal (rabbit)	LC50 Inhalation (rat)
Dipropylene glycol methyl ether	5135 mg/kg	9.5 g/kg	Not available
Alkanol polyalkoxypolyamine	220 mg/kg	610 mg/kg	Not available

SECTION 12 – ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with Local, State, and Federal Regulations; products classified as non-hazardous may become hazardous waste upon contact with other products. Consult your local, state, Provincial or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 – TRANSPORT INFORMATION

US DOT	Not regulated

Proper Shipping Name:
UN Number:
Packing Group:
Special Instructions:

IATA Not regulated

Proper Shipping Name:
UN Number:
Packing Group:
Special Instructions:

IMDG Not regulated

Proper Shipping Name:
UN Number:
Packing Group:
Special Instructions:

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)
311/312 Hazard Categories
Acute health, possible eye & skin irritant

313 Reportable Ingredients:
None

CERCLA (Comprehensive Response Compensation and Liability Act)
None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CANADA

CPR (Canadian Controlled Products Regulations
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: D2B. The Canadian Hazardous Materials Information Review Commission claim number for this product is 7924 granted on May 5, 2011.

MATERIAL SAFETY DATA SHEET

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

EUROPE

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EU CLASSIFICATION ACCORDING TO DIRECTIVE 67/548/EEC AND DIRECTIVE 1999/45/EC

Not dangerous

Risk Phrases

None

Safety Phrases

None

SECTION 16 – OTHER INFORMATION

HMIS HAZARD RATINGS	
Health	2
Flammability	0
Physical hazard	0
Personal Protection	B

HMIS SYSTEM

0 = Insignificant hazard
1 = Slight
2 = Moderate
3 = High
4 = Extreme
* = Chronic health hazard
B=Safety Glasses, Gloves

PREPARATION INFORMATION:
Effective date: May 5, 2014 Replaces: May 5, 2011
MSDS Changes: Sections 1, 2, 3, and 4
For information about this MSDS, contact Regulatory Affairs: (903) 454-8981

GLOSSTEK™ 400 PART C

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Urethane reducer
PRODUCT DESCRIPTION: Milky liquid, characteristic odor

MANUFACTURER'S NAME
JFB Hart Coatings, Inc.

ADDRESS
10210 Werch Drive, Suite 203
Woodbridge, IL 60517

DATE PREPARED: May 5, 2014
SUPERSEDES: July 21, 2010

TELEPHONE NUMBER FOR INFORMATION
(630) 633-6228

EMERGENCY TELEPHONE NUMBER
Infotrac (800) 535-5053 Outside USA (352) 323-3500

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview: Mild liquid, ingestion may cause gastric distress.

Potential Health Effects

EYE:	Contact may cause slight temporary irritation to eyes. Corneal injury is unlikely.
SKIN:	None expected, however prolonged contact may cause irritation.
INGESTION:	Small amounts ingested are not likely to cause injury. Ingestion of large amounts may cause gastric distress, vomiting and diarrhea.
INHALATION:	None expected. Certain individuals may experience minor nausea or headaches. Breathing airborne particles or dust from mixing, spraying, sanding, grinding, etc. may cause irritation to respiratory tact.

Chronic Effects / Carcinogenicity
NTP Listed: No IARC Group 1 or 2A: No OSHA Regulated: No

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Registry No.	Percentage (wt/wt)
None		

OSHA Regulatory Status: While this material is NOT considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

SECTION 4 – FIRST AID MEASURES

EYE:	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
SKIN:	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
INGESTION:	Give two glasses of water for dilution. DO NOT induce vomiting unless directed to do so by medical personnel; never give anything by mouth to an unconscious person; seek medical attention.
INHALATION:	Remove affected person to fresh air. If symptoms persist seek medical attention.

MATERIAL SAFETY DATA SHEET

SECTION 5 – FIRE FIGHTING MEASURES

Product is not considered flammable or combustible.

EXTINGUISHING MEDIA:	Carbon dioxide, water, water fog, dry chemical, chemical foam
MEDIA NOT TO BE USED:	None known
FIRE & EXPLOSION HAZARDS:	None
FIRE FIGHTING INSTRUCTIONS:	Keep containers cool with water spray to prevent container rupture due to pressure buildup; floor will become slippery if material is released.
HAZARDOUS DECOMPOSTION PRODUCTS:	Smoke, fumes, oxides of carbon and nitrogen.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Confine and absorb into approved absorbent; place material into approved container for disposal. Wash area with plenty of water.

SECTION 7 – HANDLING AND STORAGE

HANDLING	Keep away from food and drink. Wash hands before eating.
STORAGE	Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS	The use of local exhaust ventilation is recommended. No other special controls are indicated.
RESPIRATORY PROTECTION	None required while threshold limits are kept below maximum allowable concentrations. Use NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentration due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134, CSA Z94.4-93, or European Standard EN 149 for complete regulations.
SKIN PROTECTION	Protective gloves of neoprene, butyl or nitrile rubber with cuffs are recommended.
EYE PROTECTION	Goggles with side shields. Refer to 29 CFR 1910.133, CSA Z94.3-M1982, or European Standard EN166.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	Safety eyebath nearby. Coveralls, apron, or other equipment should be worn to minimize skin contact.

EXPOSURE GUIDELINES	OSHA PEL		ACGIH TWA	
	ppm	mg/m3	ppm	mg/m3
None	-	-	-	-

MATERIAL SAFETY DATA SHEET

9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Milky liquid
ODOR	Characteristic odor
BOILING POINT	214 °F (101° C)
FREEZING POINT	32 °F (0° C)
VAPOR PRESSURE	17 mm Hg @ 20 ° C
SOLUBILITY IN WATER	Dispersible
SPECIFIC GRAVITY	1.000
pH	Not specified
VOLATILE ORGANIC COMPOUNDS	5 g/l
VISCOSITY	Not determined
FLASH POINT [METHOD]	Does not flash
FLAMMABLE LIMITS	LEL: Not applicable UEL: Not applicable

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	Stable
MATERIALS TO AVOID	Strong oxidizers, strong acids
CONDITIONS TO AVOID	Extreme temperatures
HAZARDOUS DECOMPOSITION PRODUCTS	Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Component	LD50 Oral (rat)	LD50 Dermal (rabbit)	LC50 Inhalation (rat)
None	-	-	-

SECTION 12 – ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

MATERIAL SAFETY DATA SHEET

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with Local, State, and Federal Regulations; products classified as non-hazardous may become hazardous waste upon contact with other products. Consult your local, state, Provincial or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 – TRANSPORT INFORMATION

US DOT — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

IATA — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

IMDG — Not regulated
- Proper Shipping Name:
- UN Number:
- Packing Group:
- Special Instructions:

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories

None

313 Reportable Ingredients:

None

CERCLA (Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

MATERIAL SAFETY DATA SHEET

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CANADA
CPR (Canadian Controlled Products Regulations)
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: Not controlled.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)
Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

EUROPE
EINECS (European Inventory of Existing Commercial Chemical Substances)
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EU CLASSIFICATION ACCORDING TO DIRECTIVE 67/548/EEC AND DIRECTIVE 1999/45/EC
Not dangerous

Risk Phrases
None

Safety Phrases
None

SECTION 16 – OTHER INFORMATION

HMIS HAZARD RATINGS	
Health	0
Flammability	0
Physical hazard	0
Personal Protection	B

HMIS SYSTEM

0 = Insignificant hazard	3 = High
1 = Slight	4 = Extreme
2 = Moderate	* = Chronic health hazard

B=Safety Glasses, Gloves

MSDS Changes: Review. No changes.
For information about this MSDS, contact Regulatory Affairs: (903) 454-8981