SECTION 1: IDENTIFICATION

PRODUCT NAME	**ULTRA BOND™ 100 "A" Component**
CAS NUMBER	Not available
PRODUCT USE	Polyurea Coating
MANUFACTURER	Specialty Products, Inc. (SPI)
ADDRESS	2410 104TH ST. CT. S. STE D LAKEWOOD, WA 98499
PHONE	253 588 7101 800 627 0773
FAX	253 588 7196
EMERGENCY CONTACT	FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL **CHEMTREC**
TOLL FREE	**800 424 9300**
INTERNATIONAL	+1 703 527 3887
FAX	913 321 1490

SECTION 2: HAZARDS IDENTIFICATION

GHS LABEL ELEMENTS

GHS PICTOGRAM

DANGER

GHS CLASSIFICATION

CATEGORY		HAZARD STATEMENTS	
Skin corrosion/irritation	Category 2	H315	Causes skin irritation.
Skin sensitization	Category 1	H317	May cause an allergic skin reaction.
Serious eye damage/eye irritation	Category 2B	H320	Causes eye irritation.
Acute toxicity inhalation	Category 4	H332	Harmful if inhaled.
Respiratory sensitization	Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Specific target organ toxicity (STOT), single exposure; respiratory tract	Category 3	H335	May cause respiratory irritation.
Specific target organ toxicity (STOT), repeated exposure	Category 1	H372	Causes damage to organs (respiratory tract) through prolonged or repeated exposure if inhaled.

PRECAUTIONARY STATEMENTS

PREVENTION	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink, 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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
RESPONSE	
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	Specific treatment (as detailed in this SDS).
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	IF eye irritation persists: Get medical advice/attention.
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.
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P342+P311	IF experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
STORAGE	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
DISPOSAL	
P501	Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Isocyantes, reaction product of polyol with MDI	*Proprietary	10-30
2,4'-Diphenylmethane diisocyanate	5873-54-1	20-40
4,4'-Diphenylmethane diisocyanate	101-68-8	20-40
Propylene carbonate	108-32-7	1-10
2,2'-Diphenylmethane diisocyanate	2536-05-2	1-5
*The specific chemical identity and exact percentage (concentration) is withheld as a trade secret per applicable regulations and statutes.		

SECTION 4: FIRST AID MEASURES

EYE:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
SKIN:	After contact with skin, wash immediately with plenty of warm, soapy water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. A poly-glycol based skin cleanser or corn oil may be more effective than soap and water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
INHALATION:	Move exposed person to fresh air. Get medical attention immediately. Treatment is symptomatic for primary irritation or bronchospasm. If breathing is labored, oxygen should be administered by qualified personnel.
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Get medical attention if symptoms appear.
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	Not available.
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO_2 formed).
SUITABLE EXTINGUISHING MEDIA:	Dry chemical, carbon dioxide, or dry powder.
UNSUITABLE EXTINGUISHING MEDIA:	Direct water spray.
SPECIAL EXPOSURE HAZARDS:	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. If in a fire or heated, a pressure increase will occur and the container may rupture.
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. PVC boots, gloves, safety helmet, and protective clothing should be worn.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:	For major spills call **CHEMTREC**: Toll free **1-800-424-9300** for international call **1-703-527-3887**.
PERSONAL PRECAUTIONS:	Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.
ENVIRONMENTAL PRECAUTIONS:	This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources of ignition should be kept clear.
METHODS FOR CONTAINMENT:	Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand). DO NOT USE combustible materials such as sawdust. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release is reportable.
METHODS FOR CLEANING UP:	Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for recommended Personal Protective Equipment (PPE). Obey all local, state, and federal regulations during clean up.

SECTION 7: HANDLING & STORAGE

GENERAL:	Ideal storage temperature is 60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/ provincial, or federal regulations.
HANDLING:	Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded, use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking, and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers shall wash hands and face before eating, drinking, and smoking. Persons with a history of skin sensitization problems, asthma, allergies, or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.
STORAGE:	Keep container tightly closed and properly sealed when stored. Keep contents away from moisture. Due to reaction with water producing CO_2 gas, a hazardous build-up of pressure could result if contaminated containers are resealed. DO NOT reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed and stored after purging the container with argon or nitrogen gas.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS
Isocyantes, reaction product of polyol with MDI	*Proprietary	Not available
2,4'-Diphenylmethane diisocyanate	5873-54-1	Not available
4,4'-Diphenylmethane diisocyanate	101-68-8	**ACGIH TLV** TWA: 0.005 ppm 8 hour(s) **OSHA PEL** CEIL: 0.02 ppm CEIL: 0.2 mg/m^3 **NIOSH REL** CEIL: 0.2 mg/m^3 10 minute(s) CEIL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m^3 10 hour(s) TWA: 0.005 ppm 10 hour(s)
Propylene carbonate	108-32-7	Not available
2,2'-Diphenylmethane diisocyanate	2536-05-2	Not available

ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
HYGIENE MEASURES:	Wash hands, forearms, and face thoroughly with plenty of soap and water after handling chemical products, before eating, smoking, and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning, and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE PROTECTION:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.
SKIN PROTECTION:	Personal protective equipment for the body should be selected based on the task being performed, the risks involved, and should be approved by an industrial hygiene specialist before handling this product.
HANDS PROTECTION:	Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time it takes to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.
RESPIRATORY PROTECTION:	Ensure adequate ventilation. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU).
ENVIRONMENTAL EXPOSURE CONTROLS:	Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid	**FLASH POINT:**	Not available
COLOR:	Clear yellow	**AUTO-IGNITION TEMPERATURE:**	Not available
ODOR:	Slightly musty	**DECOMPOSITION TEMPERATURE:**	Not available
ODOR THRESHOLD:	Not available	**EXPLOSIVE LIMITS:**	Not explosive
pH:	Not applicable	**FLAMMABILITY:**	Not available
WATER SOLUBILITY:	Not available	**BOILING POINT:**	Not available
PARTITION COEFFICIENT:	Not available	**BOILING RANGE:**	Not available
SPECIFIC GRAVITY:	1.10±0.005 g/cc @ 77°F (25°C)	**MELTING/FREEZING POINT:**	Not available
VISCOSITY:	750±50 mPa.s @ 77°F (25°C)	**VAPOR PRESSURE:**	Not available
EVAPORATION RATE:	Not available	**VAPOR DENSITY:**	Not available
VOC:	0 g/L	**RELATIVE DENSITY:**	9.2±0.05 lbs/gal

SECTION 10: STABILITY & REACTIVITY

STABILITY:	Stable when handled and stored at temperatures 60-90°F (15-32°C).
INCOMPATIBILITY:	Incompatible with water, alcohols, amines, bases, and acids.
HAZARDOUS REACTION:	Exothermic reaction will occur when combined with sister component. Under normal conditions of storage and use, hazardous reactions will not occur. Reaction with water (moisture) produces CO_2 gas. An exothermic reaction with materials containing active hydrogen groups can occur. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. This material is insoluble with and heavier than water. It sinks to the bottom, but reacts slowly at the interface. A solid water insoluble layer of polyurea is formed at the interface by liberating carbon dioxide.
HAZARDOUS POLYMERIZATION:	Polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds. Under normal conditions of storage and use, hazardous polymerization should not occur.
CONDITIONS TO AVOID:	Avoid moisture contamination and high temperatures.
HAZARDOUS DECOMPOSITION:	May produce toxic fumes of carbon dioxide, carbon monoxide, and/or nitrogen oxides when near heat source/flame.

SECTION 11: TOXICOLOGY INFORMATION

ACUTE HEALTH EFFECTS:	
EYE CONTACT:	Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.
SKIN CONTACT:	Causes skin irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.
INHALATION:	Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible. The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of the evidence, a modified classification for acute inhalation toxicity is justified.
INGESTION:	May cause irritation of the digestive tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

ACUTE TOXICITY:

COMPONENT NAME	CAS NUMBER	LD_{50} Oral (mg/kg)	LD_{50} Dermal (mg/kg)	LC_{50} Inhalation (mg/L/4hrs)
2,4'-Diphenylmethane diisocyanate	5873-54-1	>2,000 (rat)	>9,400 (rabbit)	0.49 (rat)
4,4'-Diphenylmethane diisocyanate	101-68-8	>2,000 (rat)	>9,400 (rabbit)	0.49 (rat)
Propylene carbonate	108-32-7	>33,520 (rat)	>2,000 (rabbit)	>5 (rat)
2,2'-Diphenylmethane diisocyanate	2536-05-2	Not available	Not available	Not available

POTENTIAL CHRONIC EFFECTS:	
CHRONIC EFFECTS:	As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to isocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to isocyanates at levels well below the TLV or PEL. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent. Chronic overexposure to isocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent. Prolonged contact with skin can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates. Prolonged vapor contact with the eyes may cause conjunctivitis.
TARGET ORGANS:	Contains material which causes damage to the upper respiratory tract.
CARCINOGENICITY:	As of this publication, this material is not listed on the National Toxic Program (NTP) Report of Carcinogens. Please refer to the most recent information with NTP. The material is classified on the International Agency for Research on Cancer (IARC) Monographs as Group 3. Exposure to levels of MDI, significantly above the threshold limit value (0.005 ppm), was shown to be related to the occurrence of lung tumors in a study using rats.
MUTAGENICITY:	No known significant effects or critical hazards.
TERATOGENICITY:	No known significant effects or critical hazards.
FERTILITY EFFECTS:	No known significant effects or critical hazards.
DEVELOPMENTAL EFFECTS:	No known significant effects or critical hazards.
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory/pulmonary and skin conditions may be aggravated by overexposure.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:	Based on a review of the individual components, this product has low ecotoxicity on aquatic organisms. When in contact with water an inert non-biodegradable solid will be produced. There is no evidence of bio-accumulation occurring.

SECTION 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL:	By-product wastes or process waste generation should be eliminated and/or minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment facility without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME:	
DOT:	Other regulated substance, liquid, n.o.s. (contains: 4,4'-Diphenylmethane diisocyanate) *Single containers less than 5,000 lbs. are not regulated.
TDG:	Not regulated.
IMDG:	Not regulated.
IATA:	Not regulated.

This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

REGULATORY INFORMATION	UN NUMBER	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
DOT Classification	NA3082	9	III		**Reportable quantity 5,000 lbs. (2,268 kg)** Single containers less than 5,000 lbs. are not regulated.

*PG: Packaging group

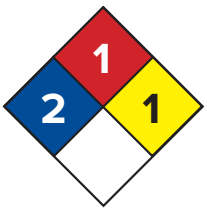
SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations					
TSCA 8b Inventory:	All components are listed on the TSCA inventory or are exempt.				
TSCA 5a (2):	No components listed.				
TSCA 5e:	No components listed.				
TSCA 12b:	No components listed.				
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**
	4,4'-Diphenylmethane diisocyanate		101-68-8		20-40%
Clean Air Act - Ozone Depleting Substances (ODS):	This product does not contain nor is it manufactured with ozone depleting substances.				
SARA 313 Form R - Reporting Requirements:	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**
	4,4'-Diphenylmethane diisocyanate		101-68-8		20-40%
SARA 311/312 hazard identification:	Immediate (acute) health hazard. Delayed (chronic) health hazard.				
CERCLA Hazardous substances:					
Component	**Concentration**	**Section 302**	**Section 313**	**Section 304**	**Reportable Quantity**
4,4'-Diphenylmethane diisocyanate	20-40%	Not listed	Listed	Not listed	5,000 lbs
STATE REGULATIONS:					
PENNSYLVANIA/NEW JERSEY/ MASSACHUSETTS - RTK:	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**
	2,4'-Diphenylmethane diisocyanate		5873-54-1		20-40%
	4,4'-Diphenylmethane diisocyanate		101-68-8		20-40%
California Prop 65:	This product contains no 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.				
CANADA					
WHMIS (Canada):	WHMIS Class D-1A: Material causing immediate and serious toxic effects (very toxic). WHMIS Class D-2A: Material causing other toxic effects (very toxic).				
CEPA DSL:	All components are listed or exempted.				
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.					
INTERNATIONAL LISTS:					
Australia inventory (AICS):	All components are listed or exempted.				
China inventory (IECSC):	All components are listed or exempted.				
Japan inventory:	All components are listed or exempted.				
Korea inventory:	All components are listed or exempted.				
New Zealand inventory of Chemicals (NZIoC):	All components are listed or exempted.				
Phillipines inventory (PICCS):	All components are listed or exempted.				

SECTION 16: OTHER INFORMATION

NFPA & HMIS	
4	Extreme
3	Serious
2	Moderate
1	Slight
0	No Hazard

National Fire Protection Association (NFPA)



HEALTH
FLAMMABILITY
REACTIVITY
SPECIAL INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	1
REACTIVITY	1
SPECIAL INFORMATION	

Note: The customer is responsible for determining the PPE code for this material. At the time of publishing, the NFPA/HMIS and the New GHS scale had opposite scales of severity. Check the most recent publications for current information.

For Your Protection:	The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by SPI will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. SPI MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Preparation Information:	This SDS supersedes **ALL** previous SDS versions.

SECTION 1: IDENTIFICATION

PRODUCT NAME	**ULTRA BOND™ 100 "B" Component**
CAS NUMBER	Not available
PRODUCT USE	Polyurea Coating
MANUFACTURER	Specialty Products, Inc. (SPI)
ADDRESS	2410 104TH ST. CT. S. STE D LAKEWOOD, WA 98499
PHONE	253 588 7101 800 627 0773
FAX	253 588 7196
EMERGENCY CONTACT	FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL **CHEMTREC**
TOLL FREE	**800 424 9300**
INTERNATIONAL	+1 703 527 3887
FAX	913 321 1490

SECTION 2: HAZARDS IDENTIFICATION

GHS LABEL ELEMENTS

GHS PICTOGRAM

DANGER

GHS CLASSIFICATION

CATEGORY		HAZARD STATEMENTS	
Acute toxicity oral	Category 4	H302	Harmful if swallowed.
Acute toxicity dermal	Category 4	H312	Harmful in contact with skin.
Skin corrosion/irritation	Category 1C	H314	Causes severe skin burns and eye damage.
Acute hazard aquatic environment	Category 3	H402	Harmful to aquatic life.
Long-term hazard aquatic environment	Category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

PREVENTION	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
RESPONSE	
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician IF you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P322	Specific measures (see section 4 on this SDS).
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.
P363	Wash contaminated clothing before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see section 4 on this SDS).
P391	Collect spillage. Hazardous to the aquatic environment.
STORAGE	
P405	Store locked up.
DISPOSAL	
P501	Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Polyoxypropylenediamine	9046-10-0	50-90
Diethylmethylbenzenediamine	68479-98-1	20-40
Glyceryl poly (oxypropylene) triamine	64852-22-8	1-10
*Proprietary	Not available	1-10
*The specific chemical identity and exact percentage (concentration) is withheld as a trade secret per applicable regulations and statutes.		

SECTION 4: FIRST AID MEASURES

EYE:	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Get medical attention if symptoms occur.
SKIN:	Wash affected areas thoroughly with soap and water. Get medical attention if symptoms occur.
INHALATION:	Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Get medical attention if symptoms occur.
INGESTION:	Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Get medical attention if symptoms occur.
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	Not available.
HAZARDS WHEN ON FIRE OR NEAR FLAME:	May produce toxic fumes of carbon dioxide and carbon monoxide when near heat source/flame. When in a closed container, pressure will increase which may lead to a rupture of the container.
SUITABLE EXTINGUISHING MEDIA:	Dry chemical foam, carbon dioxide, foam, or water spray (mist/fog) to extinguish.
UNSUITABLE EXTINGUISHING MEDIA:	None known.
SPECIAL EXPOSURE HAZARDS:	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. If in a fire or heated, a pressure increase will occur and the container may rupture.
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. PVC boots, gloves, safety helmet and protective clothing should be worn.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:	For major spills call **CHEMTREC**: Toll free **1-800-424-9300** for international call **1-703-527-3887**.
PERSONAL PRECAUTIONS:	Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.
ENVIRONMENTAL PRECAUTIONS:	This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources of ignition should be kept clear.
METHODS FOR CONTAINMENT:	Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand). DO NOT USE combustible materials such as sawdust. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release is reportable.
METHODS FOR CLEANING UP:	Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for recommended Personal Protective Equipment (PPE). Obey all local, state, and federal regulations during clean up.

SECTION 7: HANDLING & STORAGE

GENERAL:	Ideal storage temperature is 60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.
HANDLING:	Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded, use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking, and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers shall wash hands and face before eating, drinking, and smoking. Persons with a history of skin sensitization problems, asthma, allergies, or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.
STORAGE:	Keep container tightly closed and properly sealed when stored. When possible, store product indoors in a dry, well-ventilated area. Store in original container, away from incompatible materials, and away from food and drink. 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 and use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:	As of the latest revision of this document, no known exposure limits exist for this product. The absence of current exposure data does not relieve an employer, user, or other to determine the specific hazards and appropriate exposure protection measures in the application and use of this product. Personal, workplace, atmospheric, and/or biological monitoring may be required to determine the effectiveness of engineering, administrative, and/or other best practice control measures. These monitoring results determine the need for and type of respiratory protective equipment, if any. Refer to the appropriate local, state, and federal regulations and statutes for the most current information and for guidance in the determination of hazardous conditions and the correlating personal protective equipment.
ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
HYGIENE MEASURES:	Wash hands, forearms, and face thoroughly with plenty of soap and water after handling chemical products, before eating, smoking, and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning, and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.
PERSONAL PROTECTIVE EQUIPMENT (PPE):	
EYE PROTECTION:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.
SKIN PROTECTION:	Personal protective equipment for the body should be selected based on the task being performed, the risks involved, and should be approved by an industrial hygiene specialist before handling this product.
HANDS PROTECTION:	Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time it takes to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.
RESPIRATORY PROTECTION:	Ensure adequate ventilation. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU).
ENVIRONMENTAL EXPOSURE CONTROLS:	Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid	**FLASH POINT:**	Not available
COLOR:	Clear yellow	**AUTO-IGNITION TEMPERATURE:**	Not available
ODOR:	Amine odor	**DECOMPOSITION TEMPERATURE:**	Not available
ODOR THRESHOLD:	Not available	**EXPLOSIVE LIMITS:**	Not explosive
pH:	Not applicable	**FLAMMABILITY:**	Not available
WATER SOLUBILITY:	Not available	**BOILING POINT:**	Not available
PARTITION COEFFICIENT:	Not available	**BOILING RANGE:**	Not available
SPECIFIC GRAVITY:	0.99±0.005 g/cc @ 77°F (25°C)	**MELTING/FREEZING POINT:**	Not available
VISCOSITY:	300±25 mPa.s @ 77°F (25°C)	**VAPOR PRESSURE:**	Not available
EVAPORATION RATE:	Not available	**VAPOR DENSITY:**	Not available
VOC:	0 g/L	**RELATIVE DENSITY:**	8.3±0.05 lbs/gal

SECTION 10: STABILITY & REACTIVITY

STABILITY:	Stable when handled and stored at temperatures 60-90°F (15-32°C).
INCOMPATIBILITY:	Strong reaction with acids and oxidizing agents.
HAZARDOUS REACTION:	No specific data available.
HAZARDOUS POLYMERIZATION:	Hazardous polymerization will not occur under normal conditions of storage and use.
CONDITIONS TO AVOID:	Avoid temperatures above 100˚F (38°C) and freezing temperatures. Avoid moisture contamination in containers.
HAZARDOUS DECOMPOSITION:	Combustion of product will lead to oxides of nitrogen, carbon dioxide, and carbon monoxide being produced.

SECTION 11: TOXICOLOGY INFORMATION

ACUTE HEALTH EFFECTS:	
EYE CONTACT:	Not available.
SKIN CONTACT:	Not available.
INHALATION:	Not available.
INGESTION:	Not available.

ACUTE TOXICITY:

COMPONENT NAME	CAS NUMBER	LD_{50} Oral (mg/kg)	LD_{50} Dermal (mg/kg)	LC_{50} Inhalation (mg/L/4hrs)
Polyoxypropylenediamine	9046-10-0	2,885 (rat)	2,980 (rabbit)	0.37 (rat)
Diethylmethylbenzenediamine	68479-98-1	738 (rat)	>2,000 (rabbit)	Not available
Glyceryl poly (oxypropylene) triamine	64852-22-8	2,690 (rat)	12,500(rabbit)	Not available

POTENTIAL CHRONIC EFFECTS:	
CHRONIC EFFECTS:	A two year study on rats showed that diethylmethylbenzenediamine caused effects in the pancreas, liver, thyroid, and eyes. There was an increase in the number of tumors in the liver and thyroid of male rats. An increase in the number of tumors in the liver and possibly mammary glands of female rats was also found.
TARGET ORGANS:	Pancreas, liver, thyroid, and eyes.
CARCINOGENICITY:	As of this publication, this material is not listed on the National Toxic Program (NTP) Report of Carcinogens. Please refer to the most recent information with NTP.
MUTAGENICITY:	No known significant effects or critical hazards.
TERATOGENICITY:	No known significant effects or critical hazards.
FERTILITY EFFECTS:	No known significant effects or critical hazards.
DEVELOPMENTAL EFFECTS:	No known significant effects or critical hazards.
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	No known significant effects or critical hazards.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:	Based on a review of the individual components, this product may be immediately harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment, and not readily biodegradable.

SECTION 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL:	By-product wastes or process waste generation should be eliminated and/or minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment facility without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME	
DOT:	Amines, liquid, corrosive, n.o.s. (Polyoxypropylendiamine)
TDG:	Amines, liquid, corrosive, n.o.s. (Polyoxypropylendiamine)
IMDG:	Amines, liquid, corrosive, n.o.s. (Polyoxypropylendiamine)
IATA:	Amines, liquid, corrosive, n.o.s. (Polyoxypropylendiamine)

This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

REGULATORY INFORMATION	UN NUMBER	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
DOT Classification	UN2735	8	III		None
TDG Classification	UN2735	8	III		None
IMDG Classification	UN2735	8	III		**Emergency schedules (EmS)** F-A, S-B
IATA-DGR Classification	UN2735	8	III		**Passenger and Cargo Aircraft** Quantity limitation: 5 L Packaging Instructions: 852 **Cargo Aircraft Only** Quantity limitation: 60 L Packaging Instructions: 856

*PG: Packaging group

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS			
TSCA 8b Inventory:	All components are listed on the TSCA inventory or are exempt.		
TSCA 5a (2):	No components listed.		
TSCA 5e:	No components listed.		
TSCA 12b:	No components listed.		
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	No components listed.		
Clean Air Act - Ozone Depleting Substances (ODS):	This product does not contain nor is it manufactured with ozone depleting substances.		
SARA 313 Form R - Reporting Requirements:	**COMPONENT**	**CAS NUMBER**	**CONCENTRATION**
	Diethylmethylbenzenediamine	68479-98-1	20-40%
SARA 311/312 hazard identification:	Immediate (acute) health hazard. Delayed (chronic) health hazard.		
CERCLA Hazardous substances:	No components listed.		
STATE REGULATIONS:			
PENNSYLVANIA/NEW JERSEY/ MASSACHUSETTS - RTK:	No components listed.		
California Prop 65:	This product contains no 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.		
CANADA			
WHMIS (Canada):	WHMIS Class D-1B: Material causing immediate and serious toxic effects (toxic). WHMIS Class E: Corrosive.		
CEPA DSL:	All components are listed or exempted.		
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.			
INTERNATIONAL LISTS:			
Australia inventory (AICS):	All components are listed or exempted.		
China inventory (IECSC):	All components are listed or exempted.		
Japan inventory:	All components are listed or exempted.		
Korea inventory:	All components are listed or exempted.		
New Zealand inventory of Chemicals (NZIoC):	All components are listed or exempted.		
Phillipines inventory (PICCS):	All components are listed or exempted.		

SECTION 16: OTHER INFORMATION

NFPA & HMIS	
4	Extreme
3	Serious
2	Moderate
1	Slight
0	No Hazard

National Fire Protection Association (NFPA)

HEALTH
FLAMMABILITY
REACTIVITY
SPECIAL INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
SPECIAL INFORMATION	

Note: The customer is responsible for determining the PPE code for this material. At the time of publishing, the NFPA/HMIS and the New GHS scale had opposite scales of severity. Check the most recent publications for current information.

For Your Protection:	The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by SPI will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. SPI MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Preparation Information:	This SDS supersedes **ALL** previous SDS versions.