

SECTION 1: IDENTIFICATION

PRODUCT NAME	DURATHANE™ II
CAS NUMBER	Not available
PRODUCT USE	Polyurethane Elastomer 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
Flammable liquids	Category 2	H225	Highly flammable liquid and vapor.
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 2A	H319	Causes serious 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), SE	Category 3	H335	May cause respiratory irritation.
Carcinogenicty	Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity (STOT), RE	Category 2	H373	May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS

PREVENTION

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
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.

RESPONSE

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	Specific treatment (as detailed in this SDS).
P333+P313	If SKIN irritation or a rash 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.
P314	Get medical advice/attention if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P342+P311	IF experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P340	Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Xylene	1330-20-7	10-25
Methyloxirane polymer	157937-75-2	10-25
Isocyanic acid	53862-89-8	1-10
Diphenylmethane 4, 4'-diisocyanate	101-68-8	1-10
Polymeric diphenylmethane diisocyanate	9016-87-9	1-10
Diphenylmethane 2,4'-diisocyanate	5873-54-1	1-10
Ethyl benzene	100-41-4	1-10
Petroleum distillates, hydrotreated light	64742-47-8	1-10
Tosyl isocyanate	4083-64-1	<1

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:	Remove contaminated clothing and shoes/boots. Wash affected area with large amounts of soap and water. Get medical attention immediately.
INHALATION:	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
INGESTION:	If swallowed give two glasses of water to drink. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
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:	80°F (27°C).
HAZARDS WHEN ON FIRE OR NEAR FLAME:	When in a closed container, pressure will increase which may lead to a rupture of the container.
SUITABLE EXTINGUISHING MEDIA:	Use water, carbon dioxide, foam, or dry powder.
UNSUITABLE EXTINGUISHING MEDIA:	Not available.
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
Xylene	1330-20-7	OSHA PEL STEL: 150 ppm ACGIH TLV TWA: 100 ppm STEL: 150 ppm
Methyloxirane polymer	157937-75-2	Not available
Isocyanic acid	53862-89-8	Not available
Diphenylmethane 4,4'-diisocyanate	101-68-8	ACGIH TLV TWA: 0.005 ppm 8 hour(s) OSHA PEL CELL: 0.02 ppm CELL: 0.2 mg/m ³ NIOSH REL CELL: 0.2 mg/m ³ 10 minute(s) CELL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m ³ 10 hour(s) TWA: 0.005 ppm 10 hour(s)
Polymeric diphenylmethane diisocyanate	9016-87-9	ALBERTA CANADA TWA TWA: 0.005 ppm TWA: 0.07 mg/m ³
Ethyl benzene	100-41-4	OSHA PEL TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm ACGIH TLV TWA: 20 ppm NIOSH REL TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
Diphenylmethane 2,4'-diisocyanate	5873-54-1	ACGIH TLV TWA: 1 mg/m ³ NIOSH REL TWA: 10 mg/m ³ TWA: 5 mg/m ³
Petroleum distillates, hydrotreated light	64742-47-8	PEL: 300 ppm
Tosyl isocyanate	4083-64-1	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 contaminants 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:	Viscous liquid	FLASH POINT:	80°F (27°C)
COLOR:	Aluminum	AUTO-IGNITION TEMPERATURE:	Not established
ODOR:	Not available	DECOMPOSITION TEMPERATURE:	LEL: 1% UEL: 7%
ODOR THRESHOLD:	Not measured	EXPLOSIVE LIMITS:	Not explosive
pH:	Not available	FLAMMABILITY:	Not applicable
WATER SOLUBILITY:	Nil, reacts with water	BOILING POINT:	281-284°F (138-140°C)
PARTITION COEFFICIENT:	Not measured	BOILING RANGE:	281-284°F (138-140°C)
SPECIFIC GRAVITY:	1.055-1.102 g/cc	MELTING/FREEZING POINT:	Not available
VISCOSITY:	2,000-4,000 mPa.s	VAPOR PRESSURE:	Not established
EVAPORATION RATE:	Slower than ether (Ether=1)	VAPOR DENSITY:	Not available
VOC:	<250 g/L	RELATIVE DENSITY:	8.8-9.2 lbs/gal

SECTION 10: STABILITY & REACTIVITY

STABILITY:	Stable under normal conditions.
INCOMPATIBILITY:	Contact with water will cause this product to cure. Incompatible with acids, bases, and oxidizers.
HAZARDOUS REACTION:	Reaction with water can create carbon dioxide.
HAZARDOUS POLYMERIZATION:	May polymerize.
CONDITIONS TO AVOID:	No data available.
HAZARDOUS DECOMPOSITION:	Will not occur if properly handled and stored.

SECTION 11: TOXICOLOGY INFORMATION

ACUTE HEALTH EFFECTS:

EYE CONTACT:	Not available.
SKIN CONTACT:	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.
INHALATION:	Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitization of the respiratory system resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability.
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)
Xylene	1330-20-7	4,299 (rat)	1,548 (rabbit)	Not available
Methyloxirane polymer	157937-75-2	Not available	Not available	Not available
Isocyanic acid	53862-89-8	Not available	Not available	Not available
Diphenylmethane 4,4'-diisocyanate	101-68-8	>10,000 (rat)	>9,400 (rabbit)	490 (rat)
Polymeric diphenylmethane diisocyanate	9016-87-9	49,000 (rat)	>9,400 (rabbit)	Not available
Diphenylmethane 2,4'-diisocyanate	5873-54-1	Not available	Not available	Not available
Ethyl benzene	100-41-4	3,500 (rat)	15,433 (rabbit)	17,200 (rat)
Petroleum distillates, hydrotreated light	64742-47-8	>5,000 (rat)	>2,000 (rabbit)	Not available
Tosyl isocyanate	4083-64-1	2,234 (rat)	2,600 (mammal)	2,560 (rat)

POTENTIAL CHRONIC EFFECTS:

CHRONIC EFFECTS:	Not available.
TARGET ORGANS:	Not available.
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:	No known significant effects or critical hazards.

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.
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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.
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SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME:	
DOT:	UN1263, Paint, 3, PG III
IMDG:	UN1263, Paint, 3, PG III
IATA:	UN1263, Paint, 3, PG III

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	UN1263	3	III		None
TDG Classification	UN1263	3	III		Marine Pollutant
IATA-DGR Classification	UN1263	3	III		<p>Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging Instructions: 355</p> <p>Cargo Aircraft Only Quantity limitation: 220 L Packaging Instructions: 366</p>

*PG: Packaging group

SECTION 15: REGULATORY INFORMATION

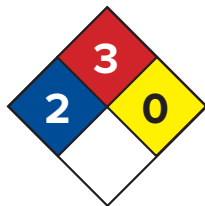
U.S. Federal Regulations					
TSCA 8b Inventory:	All components are listed on the TSCA inventory or are exempt.				
TSCA 5a (2):	No components listed.				
TSCA 5e:	No components listed.				
TSCA 12b:	No components listed.				
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	COMPONENT	CAS NUMBER	CONCENTRATION		
	4,4'-Diphenylmethane diisocyanate	101-68-8	1-5%		
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		
	Xylene	1330-20-7	10-30%		
	Ethyl benzene	100-41-4	7-13%		
	Supplier trade secret	Not available	5-10%		
	4,4'-Diphenylmethane diisocyanate	101-68-8	1-5%		
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
Xylene	10-30%	Not listed	Listed	Not listed	100 lbs
Ethyl benzene	7-13%	Not listed	Listed	Not listed	100 lbs
4,4'-Diphenylmethane diisocyanate	1-5%	Not listed	Listed	Not listed	5,000 lbs
STATE REGULATIONS:					
PENNSYLVANIA/NEW JERSEY/MASSACHUSETTS - RTK:	COMPONENT	CAS NUMBER	CONCENTRATION		
	Xylene	1330-20-7	10-30%		
	Ethyl benzene	100-41-4	7-13%		
	Supplier trade secret	Not available	5-10%		
	Polymethylene polyphenylene isocyanate	9016-87-9	1-10%		
	4,4'-Diphenylmethane diisocyanate	101-68-8	1-5%		
California Prop 65:	This product contains a substance known to the State of California to cause cancer at levels which would require a warning under the statute.				
CANADA					
WHMIS (Canada):	WHMIS Class D-2A: Material causing other toxic effects (very toxic) WHMIS Class D-2B: Material causing other toxic effects (toxic) WHMIS Class B-2: Flammable and Combustible Material (flammable liquid)				
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	3
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.