

SAFETY DATA SHEET

ELASTAFLEX[™] HP "A" Component Revised Date: 10/2/2018 Version: 18 SDS-088

SECTION 1: IDENTIFICATION

PRODUCT NAME CAS NUMBER **PRODUCT USE** MANUFACTURER ADDRESS PHONE FAX **EMERGENCY CONTACT** TOLL FREE INTERNATIONAL FAX

Skin corrosion/irritation

Skin sensitization

ELASTAFLEX[™] HP "A" Component Not available Polyurea Coating Specialty Products, Inc. (SPI) 2410 104TH ST. CT. S. STE D LAKEWOOD, WA 98499 253 588 7101 800 627 0773 253 588 7196 FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL CHEMTREC 800 424 9300 +1 703 527 3887 913 321 1490

SECTION 2: HAZARDS IDENTIFICATION

GHS LABEL ELEMENTS

GHS PICTOGRAM



DANGER **GHS CLASSIFICATION** CATEGORY H315 Causes skin irritation. Category 2 H317 May cause an allergic skin reaction. Category 1 Serious eye damage/eye irritation Category 2B H320 Causes eye irritation.

PRECAUTIONARY STATEMENTS						
Specific target organ toxicity (STOT), repeated exposure	Category 1		Causes damage to organs (respiratory tract) through prolonged or repeated exposure if inhaled.			
Specific target organ toxicity (STOT), single exposure; respiratory tract	Category 3	H335	May cause respiratory irritation.			
Respiratory sensitization	Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.			
Acute toxicity inhalation	Category 4	H332	Harmful if inhaled.			
Schous eye damage/eye imation	Cutcgory 2D	11520				

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.				

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS

HAZARD STATEMENTS



SECTION 3: COMPOSIT	ION/INFORMATION ON INGREDIENTS					
CHEMICAL NAME		CAS NUMBER	% WEIGHT			
Isocyantes, reaction product of	polyol with MDI	*Proprietary	20-40			
2,4'-Diphenylmethane diisocya	5873-54-1	10-30				
4,4'-Diphenylmethane diisocya	101-68-8	10-30				
Propylene carbonate	108-32-7	1-15				
2,2'-Diphenylmethane diisocya	nate	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 attent						
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 a 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. irritation or bronchospasm. If breathing is labored, oxygen should be					
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. Never person. Provided the patient is conscious, wash out mouth with water. Get me					
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe exmonitored for 48 hours.	kposure, medical follow	-up should be			
SECTION 5: FIRE FIGHT	ING MEASURES					
FLASH POINT:	278°F (137°C).					
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO, formed).					
SUITABLE EXTINGUISHING MEDIA:						
UNSUITABLE EXTINGUISHING MEDIA:						
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:						
SECTION 6: ACCIDENTA	L RELEASE MEASURES					
ACCIDENTAL RELEASE MEASURES:	For major spills call CHEMTREC: Toll free 1-800-424-9300 for international for international statements of the second statement of the second statemen	ational call 1-703-527-3	887.			
PERSONAL PRECAUTIONS: Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CON PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. dealing with major spillages should wear full protective clothing including respiratory protection.		e the area. Keep Inel. People				
ENVIRONMENTAL PRECAUTIONS: This material may contaminate the environment without proper control and response to spills material does not come in contact with soil, waterway, drains, sewers, or other runoff that wo disperse the material. Inform the relevant authorities if the product has caused environment (sewers, waterways, soil, or air). Sources of ignition should be kept clear.		ould further				
METHODS FOR CONTAINMENT:						
METHODS FOR CLEANING UP:	Only proceed with clean up by taking the appropriate personal protection surrounding area does not contain further hazards that could worsen the harm (i.e. eliminate any ignition sources). Move any non-contaminated, n if it can be done safely. Dike, dam, or further restrict and stop active leaks to individuals, the environment, and/or structures. Contain and collect sp CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE recommended Personal Protective Equipment (PPE). Obey all local, state	spill, cause migration, or on-leaking containers fro without posing further of illage. See SECTION 13: CONTROL/ PERSONAL	cause further m the spill zone lamage or harm DISPOSAL PROTECTION for			

60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/ ons.
d and follow warning labels on all components. Avoid contact with the product or reaction
Id and follow warning labels on all components. Avoid contact with the product or reaction onal protective equipment. Use only with adequate ventilation to ensure that the occupational se respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See OL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking, and smoking shall material is handled, stored, and processed. Workers shall wash hands and face before eating, with a history of skin sensitization problems, asthma, allergies, or chronic or recurrent respiratory in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in wed alternative made from a compatible material. Keep tightly closed when not in use. Empty and can be hazardous. Do not reuse containers.
and properly sealed when stored. Keep contents away from moisture. Due to reaction s, a hazardous build-up of pressure could result if contaminated containers are taminated containers. Uncontaminated containers, free of moisture, may be resealed

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

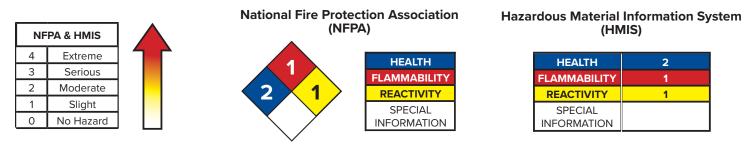
XPOSURE LIMITS:					
COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS			
Isocyantes, reaction product of polyol with MDI	*Proprietary	Not available			
2,4'-Diphenylmethane diisocyanate	5873-54-1	5873-54-1 Not available			
4,4'-Diphenylmethane diisocyanate	101-68-8 ACGIH TLV TWA: 0.005 ppm 8 hour(s) OSHA PEL CEIL: 0.02 ppm CEIL: 0.2 mg/m ³ NIOSH REL CEIL: 0.2 mg/m ³ 10 minute(s) CEIL: 0.2 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				
NGINEERING 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 EQU	E 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 PROPE	RTIES					
PHYSICAL STATE:	Liquid	FLAS	H POINT:	278°F (137°C)			
COLOR:	Clear yellow	AUTO	-IGNITION TEMPERATURE:	Not available			
ODOR:	Slightly musty	DECO	MPOSITION TEMPERATURE:	Not available			
ODOR THRESHOLD:	DOR THRESHOLD: Not available E		DSIVE LIMITS:	Not explosive			
pH: Not applicable F			FLAMMABILITY: Not available				
WATER SOLUBILITY:	Not available	BOILI	NG POINT:	Not available			
PARTITION COEFFICIENT:	Not available	BOILI	NG RANGE:	Not available			
SPECIFIC GRAVITY:	1.10±0.005 g/cc @ 77°	F (25°C) MELT	NG/FREEZING POINT:	Not available			
VISCOSITY:	525±50 mPa.s @ 77°F	(25°C) VAPC	R PRESSURE:	Not available			
EVAPORATION RATE:	Not available	VAPC	R DENSITY:	Not available			
VOC:	0 g/L	RELA	TIVE DENSITY:	9.2±0.05 lbs/gal			
SECTION 10: STABILITY &							
STABILITY:	Stable when handled	and stored at tempe	eratures 60-90°F (15-32°C).				
INCOMPATIBILITY:	Incompatible with wat	er, 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:							
			g) LD ₅₀ Dermal (mg/kg)				
COMPONENT NAME	CAS NUMBER	LD ₅₀ Oral (mg/k	$ED_{50} Derma (IIIg/Rg)$	LC ₅₀ Inhalation (mg/L/4hrs)			
COMPONENT NAME 2,4'-Diphenylmethane diisocyanate	CAS NUMBER 5873-54-1	>2,000 (rat)	>9,400 (rabbit)	0.49 (rat)			
2,4'-Diphenylmethane diisocyanate	5873-54-1	>2,000 (rat)	>9,400 (rabbit)	0.49 (rat)			

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 isocyanates. Prolonged vapor contact with the eyes may cause conjunctivitis.						
TARGET ORGANS:	Contains material w	vhich causes da	amage to	o the upper	r 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 significa	nt effects or cri	tical haz	ards.			
TERATOGENICITY:	No known significa	nt effects or cri	tical haz	ards.			
FERTILITY EFFECTS:	No known significa	nt effects or cri	tical haz	ards.			
DEVELOPMENTAL EFFECTS:	No known significa	nt effects or cri	tical haz	ards.			
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory	/pulmonary and	d skin co	onditions ma	ay be aggravated by overexposure.		
SECTION 12: ECOLOGICA		N					
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 C	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	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.						
and laws. Users, transporters, and	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	111		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 lis	ted.				
TSCA 5e:	No components lis	ted.				
TSCA 12b:	No components lis	ted.				
Clean Air Act Section 112(b)	СОМР	ONENT	CAS N	CONCENTRATION		
Hazardous Air Pollutants (HAPs):	4,4'-Diphenylmetha	ane diisocyanate	101	-68-8	10-30%	
Clean Air Act - Ozone Depleting Substances (ODS):	This product does	not contain nor is it m	anufactured with o	zone depleting subs	tances.	
SARA 313 Form R - Reporting	COMP	ONENT	CAS N	UMBER	CONCENTRATION	
Requirements:	4,4'-Diphenylmetha	ane diisocyanate	101	-68-8	10-30%	
SARA 311/312 hazard identification:	Immediate (acute) I Delayed (chronic) I					
CERCLA Hazardous substances:						
Component	Concentration	Section 302	Section 313	Section 304	Reportable Quantity	
4,4'-Diphenylmethane diisocyanate	10-30%	Not listed	Listed	Not listed	5,000 lbs	
STATE REGULATIONS:						
PENNSYLVANIA/NEW JERSEY/	COMPONENT		CAS NUMBER		CONCENTRATION	
MASSACHUSETTS - RTK:	2,4'-Diphenylmethane diisocyanate		5873-54-1		10-30%	
	4,4'-Diphenylmethane diisocyanate		101-68-8		10-30%	
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.					
Australia inventory (AICS).	All components are listed or exempted.					
China inventory (IECSC):	· · ·	e listed or exempted.				
- · · ·	All components are	e listed or exempted. e listed or exempted.				
China inventory (IECSC):	All components are	· · ·				
China inventory (IECSC): Japan inventory:	All components are All components are All components are	e listed or exempted.				
China inventory (IECSC): Japan inventory: Korea inventory: New Zealand inventory of	All components are All components are All components are All components are	e listed or exempted. e listed or exempted.				

SECTION 16: OTHER 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.