

ECO-RISE[™] "A" Component Revised Date: 9/13/2018 Version: 3 SDS-148

SECTION 1: IDENTIFICATION	
PRODUCT NAME	
CAS NUMBER	
PRODUCT USE	
NANULEA OTUDED	

MANUFACTURER ADDRESS PHONE FAX **EMERGENCY CONTACT** TOLL FREE INTERNATIONAL FAX

Not available Polyurethane Foam 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

HAZARD STATEMENTS

SECTION 2: HAZARDS IDENTIFICATION

CATEGORY

GHS LABEL ELEMENTS

ECO-RISE[™] "A" Component

GHS PICTOGRAM



DANGER **GHS CLASSIFICATION**

Skin corrosion/ii	tation Category 2 H315 Causes skin irritation.					
Skin sensitizatio	kin sensitization Category 1 H317 May cause an allergic skin reaction.			May cause an allergic skin reaction.		
Serious eye dan	mage/eye irritation	Category 2B	H320	Causes eye irritation.		
Acute toxicity in	halation	Category 4	H332	Harmful if inhaled.		
Respiratory sens	sitization	Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
Specific target c exposure; respir	get organ toxicity (STOT), single Category 3 H335		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						
			PREV	'ENTION		
P260	Do not breathe dust/fume	Do not breathe dust/fume/gas/mist/vapors/spray.				
P264	Wash hands thoroughly at	Wash hands thoroughly after handling.				
P270	Do not eat, drink, or smok	Do not eat, drink, or smoke when using this product.				
P271	Use only outdoors or in a	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 ple	IF ON SKIN: Wash with plenty of soap and water.				

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	314 Get medical advice/attention if you feel unwell.				
	STORAGE				
P403+P233	3 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.				

proance with applicable regio

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS



SECTION 3: COMPOSIT	ION/INFORMATION ON INGREDIENTS						
CHEMICAL NAME		CAS NUMBER	% WEIGHT				
Polymethylene polyphenylene	9016-87-9	30-70					
4,4'-Diphenylmethane diisocyanate101-68-830-							
SECTION 4: FIRST AID	MEASURES						
EYE:	In case of contact, immediately flush eyes with plenty of water for at least 15 min	utes. Get medical attent	ion 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 vater. 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. T irritation or bronchospasm. If breathing is labored, oxygen should be a	Treatment is symptom dministered by qualifi	atic for primary ed personnel.				
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. Never g person. Provided the patient is conscious, wash out mouth with water. Get medi	ive anything by mouth to ical attention if symptom	o an unconscious s appear.				
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe exp monitored for 48 hours.	oosure, medical follow	<i>r</i> -up should be				
SECTION 5: FIRE FIGHT	ING MEASURES						
FLASH POINT:	Not available.						
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Closed container may forcibly rupture under extreme heat or when cor (CO, formed).	ntents are contaminate	ed with water				
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: ACCIDENTA							
ACCIDENTAL RELEASE MEASURES:	SE 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:

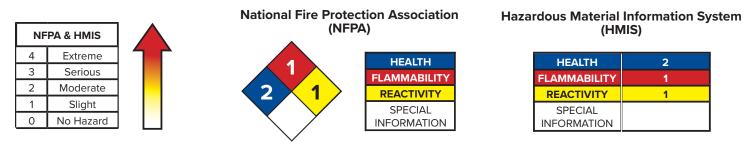
COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS				
Polymethylene polyphenylene isocyanate	9016-87-9	ALBERTA CANADA TWA TWA: 0.005 ppm TWA: 0.07 mg/m ³				
4,4'-Diphenylmethane diisocyanate	101-68-8	ACGIH TLV TWA: 0.005 ppm 8 hour(s) OSHA PEL CEIL: 0.2 ppm CEIL: 0.2 mg/m ³ NIOSH REL CEIL: 0.2 mg/m ³ 10 minute(s) CEIL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m ³ 10 hour(s) TWA: 0.005 ppm 10 hour(s)				
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 EQU	NAL 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:	prevent potential environmenta potential environmental hazards	raw and spent materials and wastes in compliance with all local, state, and federal regulations to tential environmental contamination. Industrial air monitoring may be required to determine any nvironmental hazards to the atmosphere. This monitoring may result in the use of engineering and ive controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.				

SECTION 9: PHYSICAL &	CHEMICAL PROPE	RTIES					
PHYSICAL STATE:	Liquid		FLASH POI	NT:	446°F (230°C)		
COLOR:	Dark brown	1	AUTO-IGNI	TION TEMPERATURE:	Not available		
ODOR:	Musty odor		DECOMPOSITION TEMPERATURE:		> 400°F (204°C)		
ODOR THRESHOLD:	Not available		EXPLOSIVE	LIMITS:	Not explosive		
pH:	Not applicable		FLAMMABI	LITY:	Not available		
WATER SOLUBILITY:	Not available		BOILING P	DINT:	Not available		
PARTITION COEFFICIENT:	Not available		BOILING R	ANGE:	> 400°F (204°C)		
SPECIFIC GRAVITY:	1.25±0.005 g/cc @ 77	7°F (25°C)	MELTING/F	REEZING POINT:	Not available		
VISCOSITY:	200±50 mPa.s @ 77°F	F (25°C)	VAPOR PR	ESSURE:	10-4 mmHg @ 104°F (40°C)		
EVAPORATION RATE:	Not available		VAPOR DE	NSITY:	Not available		
VOC:	0 g/L		RELATIVE	DENSITY:	10.4±0.05 lbs/gal		
SECTION 10: STABILITY &							
STABILITY:	especially highly reac	tive toward a l	large numbe	lsocyanates are very reacter of compounds with activ May make brittle many pla	e hydrogens, particularly at high		
INCOMPATIBILITY:	Water reacts slowly, forming carbon dioxide and an inert material comprised of polyureas which could rupture closed containers. 4, 4'- methylene dianiline is formed as in intermediate product in this reaction. At temperatures above 122°F (50°C), the reaction becomes progressively more vigorous. Amines, alcohols, acids, and bases may react violently with generation of heat. Metal compounds (e.g. organotin catalysts) may polymerize with generation of heat and pressure.						
HAZARDOUS REACTION:	Polymeric MDI may undergo uncontrolled exothermic polymerization upon contact with incompatible materials or if heated above 347°F-399°F (175-204°C). The resulting pressure build-up could rupture closed containers. May cause some corrosion to copper alloys and aluminum.						
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 conditions of heat, moisture, and direct sunlight.						
HAZARDOUS DECOMPOSITION:	May produce toxic fume	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 serious eye irritation. Contact with liquid, mist and aerosols may cause irritation with redness, swelling, pain, and watering of the eyes.						
SKIN CONTACT:	Causes skin irritation and may cause allergic skin reaction. Polymeric MDI can cause mild irritation. Skin sensitization, resulting in dermatitis, may occur in some individuals. Application of single doses of 2.5, 3.9, 6.0 and 9.4 mg/kg Polymeric MDI to abraded skin of rabbits, under a cover for 24 hours, caused only minor, local, reversible skin changes.						
INHALATION:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Polymeric MDI has an extremely low vapor pressure and it is difficult to achieve vapor concentrations necessary for inhalation toxicity testing. Symptoms of severe irritation and deaths occurred at 13.6 mg/m ³ . Less severe irritation and no deaths occurred at 4.9 mg/m3. There were no visible effects at 2.2 mg/m ³ .						
INGESTION:	Swallowing may result in irritation and corrosion of the mouth, throat, and digestive tract.						
ACUTE TOXICITY:							
COMPONENT NAME	CAS NUMBER	LD ₅₀ Oral	(mg/kg)	LD ₅₀ Dermal (mg/kg)	LC ₅₀ Inhalation (mg/L/4hrs)		
Polymethylene polyphenylene isocyanate	9016-87-9	>10,000	D (rat)	>6,200 (rabbit)	0.49 (rat)		
4,4'-Diphenylmethane diisocyanate	101-68-8	>2,000) (rat)	>9,400 (rabbit)	0.49 (rat)		
-							

POTENTIAL CHRONIC EFFECTS:						
CHRONIC EFFECTS:	Contains material that can cause target organ damage. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.					
TARGET ORGANS:	Long-term, low-level exposure my cause severe, permanent respiratory impairment.					
CARCINOGENICITY:	This material does not contain any component that is considered a human carcinogen by the International Agency for Research on Cancer (IARC), American Conference of Governmental Industrial Hygienists (ACGIH), OSHA or the National Toxicology Program (NTP). IARC has concluded that polymeric MDI and MDI are not classifiable as to their carcinogenicity to humans (Group 3). Although lifetime inhalation of PMDI aerosols by rats resulted in a small number of benign adenomas, they are considered to be of unlikely relevance to occupational exposures. Such aerosols are not encountered outside of the experimental laboratory.					
MUTAGENICITY:	No known significa	nt effects or crit	tical haz	ards.		
TERATOGENICITY:	No known significa	nt effects or crit	tical haz	ards.		
FERTILITY EFFECTS:	No known significa	nt effects or crit	tical haz	ards.		
DEVELOPMENTAL EFFECTS:	No known significa	nt effects or crit	tical haz	ards.		
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory	/pulmonary and	l skin cc	onditions m	ay be aggravated by overexposure.	
SECTION 12: ECOLOGICA	L INFORMATION	V				
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	ONSIDERATION	l				
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	DRT 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	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 I	NFORMATION							
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	l.						
TSCA 12b:	No components listed	d.						
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	СОМРО	NENT	CAS N	CONCENTRATION				
nazardous Air Poliutants (nAPs):	4,4'-Diphenylmethane	e diisocyanate	101-	68-8	30-70%			
Clean Air Act - Ozone Depleting Substances (ODS):	This product does no	t contain nor is it m	anufactured with o	ozone depleting su	bstances.			
SARA 313 Form R - Reporting	СОМРО	NENT	CAS N	UMBER	CONCENTRATION			
Requirements:	Polymethylene polyp isocyanate	henylene	9016	i-87-9	30-70%			
	4,4'-Diphenylmethane	e diisocyanate	101-	68-8	30-70%			
SARA 311/312 hazard identification:	Not classified.							
CERCLA Hazardous substances:	·							
Component	Concentration	Section 302	Section 313	Section 304	Reportable Quantity			
Polymethylene polyphenylene socyanate	30-70%	Not listed	Listed	Not listed	Not available			
4,4'-Diphenylmethane diisocyanate	30-70%	Not listed	Listed	Not listed	5,000 lbs			
STATE REGULATIONS:								
PENNSYLVANIA/NEW JERSEY/	СОМРО	NENT	CAS NUMBER		CONCENTRATION			
MASSACHUSETTS - RTK:	Polymethylene polyphenylene isocyanate		9016-87-9		30-70%			
	4,4'-Diphenylmethane	e diisocyanate	101-68-8		30-70%			
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 a the information required by the Cont	ccordance with the ha rolled Products Regul	zard criteria of the ations.	Controlled Produ	icts Regulations a	nd the SDS contains all			
INTERNATIONAL LISTS:								
Australia inventory (AICS):	All components are listed or exempted.							
China inventory (IECSC):	All components are li	sted 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



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.