I&I Guard®-SSF
BY VORTEX

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	• I&I Guard®-SSF Part A
Trade Name	• I&I Guard®-SSF Part A
Company	• Quadex LLC, 564 W. 9320 S., Sandy, UT 84070
Company Contact	• Matthew Peterson
Company Phone	• 844-782-4832
Emergency	• Domestic Shipments and to Canada: 1-800-633-8253 • International Shipments: 1-801-629-0667

2. HAZARDS IDENTIFICATION

GHS Ratings			
	Inhalation Toxicity	• Acute Tox. 1	• Gases<=100ppm, Vapors<=0.5mg/l, Dusts&mists<=0.05mg/l
	Skin Corrosive	• 2	• Reversible adverse effects in dermal tissue, Draize score: >=2.3 < 4.0 or persistent inflammation
	Eye Corrosive	• 2A	• Eye irritant: Subcategory 2A, Reversible in 21 days
	Respiratory Sensitizer	• 1	• Respiratory sensitizer
	Skin Sensitizer	• 1	• Skin sensitizer
	Carcinogen	• 2	• Limited evidence of human or animal carcinogenicity
Hazard Statement(s)			
	H315	• Causes skin irritation	
	H317	• May cause an allergic skin reaction	
	H319	• Causes serious eye irritation	
	H330	• Fatal if inhaled	
	H334	• May cause allergy or asthma symptoms or breathing difficulties if inhaled	
	H351	• Suspected of causing cancer	

2. HAZARDS IDENTIFICATION (CONTINUED)

Precautionary Statement(s)		
	P201	• Obtain special instructions before use
	P202	• Do not handle until all safety precautions have been read and understood
	P260	• Do not breathe dust/fume/gas/mist/vapours/spray
	P261	• Avoid breathing dust/fume/gas/mist/vapours/spray
	P264	• Wash ... 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
	P281	• Use personal protective equipment as required
	P284	• Wear respiratory protection
	P285	• In case of inadequate ventilation wear respiratory protection
	P310	• Immediately call a POISON CENTER or doctor/physician
	P320	• Specific treatment is urgent (see ... on this label)
	P321	• Specific treatment (see ... on this label)
	P362	• Take off contaminated clothing and wash before reuse
	P363	• Wash contaminated clothing before reuse
	P302+P352	• IF ON SKIN: Wash with soap and water
	P304+P340	• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
	P304+P341	• IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
	P305+P351+P338	• IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
	P308+P313	• IF exposed or concerned: Get medical advice/attention
	P332+P313	• If skin irritation occurs: Get medical advice/attention
	P333+P313	• If skin irritation or a rash occurs: Get medical advice/attention
	P337+P313	• If eye irritation persists, get medical advice/attention
	P342+P311	• Call a POISON CENTER or doctor/physician

2. HAZARDS IDENTIFICATION (CONTINUED)

Precautionary Statement(s)		
	P405	• Store locked up
	P403+P233	• Store in a well ventilated place. Keep container tightly closed
	P501	• Dispose of contents/container to …
Signal Word	• Danger	
Pictogram		

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Cas #	Weight Concentration %
Polymeric Diphenylmethane Diisocyanate	• 9016-87-9	• 50.00% - 60.00%
4,4'Diphenylmethane Diisocyanate	• 101-68-8	• 30.00% - 40.00%
Diphenylmethane	• 5873-54-1	• 1.00% - 5.00%
Proprietary		• 0.10% - 1.00%

4. FIRST AID MEASURE

If inhaled remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. Consult a physician immediately if symptoms such as shortness of breath or asthma are observed. A hyper-reactive response to even a minimal concentration of diisocyantes may develop in sensitiesed persons. This product is a respiratory irritant and potential respiratory sensitise: repeated inhalation of vapor or aerosol at levels above occupational exposure limit could cause respiratory sensitisation.

Rinse immediately with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue Rinsing. Get medical attention, if irritation or symptoms of overexposure persists. Immediately wash skin with soap and plenty of water. Sever allergic skin reactions, bronchiospasm and anaphylactic shock possible. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point	• N/A
LEL	• N/A
UEL	• N/A
Not applicable	
Foam, Carbon dioxide (CO2) or dry chemical or water spray (water stream may be ineffective).	
Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyante may be vigorous.	
Not available	
Firefighters, and others exposed, wear self-contained breathing apparatus.	

6. ACCIDENTAL RELEASE MEASURES

Stop leak. Dike or contain spill. Pump into slavage tanks and/or absorb with suitable material. Use sparkless shovel to remove material. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use appropriate containment and clean up immediately. Corrosive. Avoid personal contact and breathing vapor or mist. Stop leak. Dike and contain spill. Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

7. HANDLING AND STORAGE

Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Avoid exposure to heat, light, and air for prolonged periods of time. Store in a cool, dry well ventilated area away from sources of heat and incompatable materials. Eliminate all ignition materials and incompatible materials. Collect spill with non spark tools. No information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name / CAS No.	• Polymeric Diphenylmethane Diisocyanate 9016-87-9
OSHA Exposure Limits	• Not Established.
ACGIH Exposure Limits	• Not Established.
Other Exposure Limits	• Not Established.

Chemical Name / CAS No.	• 4,4'Diphenylmethane Diisocyanate 101-68-8
OSHA Exposure Limits	• Not Established.
ACGIH Exposure Limits	• 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))
Other Exposure Limits	• NIOSH: 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate); 0.05 mg/m^3 TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m^3 Ceiling (10 min)

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (CONTINUED)

Chemical Name / CAS No.	• Diphenylmethane 5873-54-1
OSHA Exposure Limits	• Not Established.
ACGIH Exposure Limits	• Not Established.
Other Exposure Limits	• Not Established.

Chemical Name / CAS No.	• Proprietary
OSHA Exposure Limits	• Not Established.
ACGIH Exposure Limits	• Not Established.
Other Exposure Limits	• Not Established.

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended. Always use adaquate ventilation that comply with local regulations.

Eye/face Protection	• Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection reulation, or the Europena standard EN 166.
Skin Protection	• Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection	• A NIOSH air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive presure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstance where air purifyig respirator may not provide adequate protection.

9. PHYSICAL & CHEMICAL PROPERTIES

Specific Gravity (SG)	• 1.230
Lbs VOC/Gallon Less Water	• 0.00
Lbs VOC/Gallon Less Exempt	• 0.00
% VOL by Volume	• 0.00

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stable, Hazardous polymeraization will not occur. Will react with Polyurethane Resins especially at elevated temperatures. STABLE. Polyuethane Resins under uncontrolled conditions. Acids. Amines. Metals. Water. Carbon Dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke. Hydrocarbons. Hydrogen cyanide (hydrocyanic acid). Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity	• Inhalation Toxicity LC50: 0mg/L
Component Toxicity	• 9016-87-9 — Polymeric Diphenylmethane Diisocyanate Oral LD50: 49 g/kg (Rat) Inhalation LC50: 490 mg/m3 (Rat) • 101-68-8 — 4,4'Diphenylmethane Diisocyanate Inhalation LC50: 369 mg/m3 (Rat)
Eyes	• Irritant to the eyes. Corrosive to Eyes.
Skin	• Irritant to the skin. Corrosive to Skin.
Inhalation	• Irritant to respiratory tract. Prolonged or excessive inhalation may cause respiratory tract irritation.
Avoid breathing vapors	
Oral	• N.D.A.
Dermal	• N.D.A.
Inhalation	• N.D.A.

12. ECOLOGICAL INFORMATION

No ecotoxicity data was found for the product. Component Ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

14. TRANSPORT INFORMATION

NA 3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S. (Methylene Diphenyl Diisocyanate).
DOT Class 9
DOT Packaging Class III
Marine Polutent: No

15. REGULATORY INFORMATION

SARA III: Sec311 & 312
CA PROP. 65 NOTICE: This product does not contain any chemicals known by the State of California to cause cancer, birth defects or any other reproductive harm.

Canadian Regulatory Information	• WHMIS; Class 9 • WHMIS Symbols: Stylized T. • WHMIS Trade Secret Registry Numbers: None • Hazardous Products Act Informtion: This product SDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 13 and 14). • State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin: 5873-54-1 Diphenylmethane 1 to 5 % • The following chemicals are classified under SARA 313 Toxic Release Inventory (TRI): 9016-87-9 Polymeric Diphenylmethane Diisocyanate — 50 to 60% 101-68-8 4,4'Diphenylmethane Diisocyanate — 30 to 40% 5873-54-1 Diphenylmethane — 1 to 5%
Country	• EU
Safety Phrase	• None
Regulation	• REACH (EU) SUBSTANCES OF VERY HIGH CONCERN Toxic Substance Control Act (TSCA)
All Components Listed	• EU - No • TSCA - Yes

16. OTHER INFORMATION

Further Information	• HMIS® is a registered trade and service mark of the NPCA.	
HMIS® Ratings		
	Health	• 2
	Flammability	• 1
	Physical hazard	• 1
NFPA Ratings		
	Health	• 2
	Flammability	• 1
	Instability	• 1
Disclaimer	• The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification, The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.	
Issue Date	• Not available.	
This Data Sheet Contains	• Product and Company Identification: Synonyms changes from the previous Physical & Chemical Properties: Multiple Properties version in section(s): Transport Information: Material Transportation Information Regulatory Information: United States.	