

MSDS

Secure Set

Identity as Used on Label and List:

“A” Component

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Section I: Product Identification and Use

Product Identification:

SECURE SET

Product Use Water activated polyurethane resin

GRA Services, LLC

5020 East 2nd Street

Edmond, OK 73034

(405)330-2395

Section II: Ingredients

Ingredients	Percent	CAS#	P.E.L.
4.4 Diphenylmethane-diisocyanate	Trade Secret	101-68-6	0.02 ppm, ceiling
Modified MDI	Trade Secret	Not Listed	

Section III: Physical Data

Physical State:	Liquid
Odor and Appearance:	Pale Yellow Liquid with faint odor
Odor Threshold (ppm):	Not established
Boiling Point	Decomposes at 646°F
Freezing Point	Not Determined
Vapor Pressure mmGH (@20°C):	<0.001 mmHG
Vapor Density (Air=1)	Not Known
Evaporation Rate:	Not applicable
PH:	Not applicable
Specific Gravity:	1.2
Coeff. Water/Oil Base	Unknown

Section IV: Fire and Explosion Hazard Data

Flammability	No
Means of extinction:	Water fog, carbon dioxide or dry chemicals
Flashpoint and Method:	450°F C.O.C. Method
Upper UEL:	Not Determined
Lower UEL:	Not Determined
Autoignition temperature:	Not applicable
Hazardous combustion products	Carbon monoxide, nitrogen oxides, carbon dioxide. Firefighters should wear self-contained breathing apparatus with full-face piece.
Sensitivity to impact:	None
Sensitivity to static discharge:	None

Section V: Reactivity Data

Stable	
Incompatibility with other substances:	Yes – Water, amines, strong bases
Reactivity & Conditions:	Yes – Storage of open or sealed containers in moist or wet environments
Hazardous decomposition products:	None

Section VI: Toxicological Properties

Effects of acute exposure to product:	Skin rash and sensitization of fair skin persons.
Effects of chronic exposure to product:	Lung irritation and emphysema.
Exposure Limits:	NIOSH-REL, 0.005 ppm TWA and 0.002 ppm STEL (MDI)
Irritancy of Product:	Yes
Sensitization of Product:	Yes
Carcinogenicity:	No
Teratogenicity:	None
Reproductive Toxicity:	None
Mutagenicity:	None
Synergistic Products:	None
OSHA Regulated:	No

Section VII: Preventative Measures

Personal Protective Equipment

Gloves:	Nitrile rubber gloves
Respirator (specify):	NIOSH/MSHA self contained in OSHA defined space.
Eye (specify):	Chemical splash guard goggles.
Footwear (specify):	Boots
Clothing (specify):	Impervious clothing
Engineering Controls:	Provide sufficient ventilation to maintain exposure below TLV
Handling Procedure:	Use only in well ventilated areas unless recommended respiratory protection is used. Keep body contact and splash to a minimum. Do not cut empty steel drums with a welding torch.
Leak & Spill Procedure:	Cover spill with absorbent material, remove from surface and place in open container. Spills may be a slipping hazard.
Water Disposal:	Any disposal practice must be in compliance with all Federal, State, Provincial and Local laws and regulations. Product as sold is not a RCRA hazardous.
Waste when disposed:	Slowly stir the isocyanate waste into the decontaminated solution described above using 10 parts of the solution for each part of the isocyanate. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away. Neutralize the waste, neither liquid or solid is hazardous waste under RCRA, 40 CFT 261.
Handling Procedures and Equipment:	Never spray product. Do not drink, smoke or eat during handling. Avoid eye contact.
Storage Requirements:	Store at 50°F to 100°F.
Shipping Instructions:	None

Section VIII: First Aid Measures

Eyes:	Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. Obtain immediate medical attention.
Skin:	Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. Consult a physician if irritation develops.
Ingestion:	<u>Do Not Induce Vomiting.</u> Give victim large amounts of water to drink. Keep person warm, quite and seek medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Aspiration or material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.
Inhalation:	If affected, move individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and seek immediate medical attention.

MSDS

Secure Set

Identity as Used on Label and List:

“B” Component

Page 1 “B”

Section I: Product Identification and Use

Product Identification:

SECURE SET

Product Use Water activated polyurethane resin

GRA Services, LLC
5020 East 2nd Street
Edmond, OK 73034
(405)330-2395

Section II: Ingredients

Ingredients	Percent	CAS#	LD ₅₀ of Ingredient
Polyether polyol	Trade Secret	025214-63-5	Not Listed
1,1 Dichloro-1Fluoroethane	Trade Secret	1717-00-6	Not Listed

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Section III: Physical Data

Physical State:	Liquid
Odor and Appearance:	Liquid with faint odor
Odor Threshold (ppm):	Not established
Boiling Point	Product decomposes at higher temperature
Freezing Point	Not Determined
Vapor Pressure mmGH (@20°C):	Nil
Vapor Density (Air=1)	> 1.0
Evaporation Rate:	Not applicable
PH:	Not applicable
Specific Gravity:	1.052
Coeff. Water/Oil Base	Unknown

Section IV: Fire and Explosion Hazard Data

Flammability	Yes
Means of extinction:	Water fog, carbon dioxide or dry chemicals
Flashpoint and Method:	405°F PMCC ASTM D93
Upper UEL:	Not Determined
Lower UEL:	Not Determined
Autoignition temperature:	Not applicable
Hazardous combustion products	Carbon monoxide, nitrogen oxides, carbon dioxide.
Sensitivity to impact:	None
Sensitivity to static discharge:	None

Section V: Reactivity Data

Stable	
Incompatibility with other substances:	Yes – Water, amines, strong bases
Reactivity & Conditions:	Yes – Storage of open or sealed containers in moist or wet environments
Hazardous decomposition products:	Combustion may produce carbon dioxide and toxic carbon monoxide. Unidentified organic compounds may be formed during combustion.

Effects of acute exposure to product:	Skin rash and sensitization of fair skin persons.
Effects of chronic exposure to product:	Lung irritation and emphysema. Skin Reaction.
Exposure Limits:	None
Irritancy of Product:	Yes
Sensitization of Product:	Yes
Carcinogenicity:	No
Teratogenicity:	None
Reproductive Toxicity:	None
Mutagenicity:	None
Synergistic Products:	None
OSHA Regulated:	No

Section VII: Preventative Measures

Personal Protective Equipment

Gloves:	Nitrile rubber gloves
Respirator (specify):	NIOSH/MSHA self contained in OSHA defined space.
Eye (specify):	Chemical splash guard goggles.
Footwear (specify):	Boots
Clothing (specify):	Impervious clothing
Engineering Controls:	Provide sufficient ventilation to maintain exposure below TLV
Handling Procedure:	Use only in well ventilated areas unless recommended respiratory protection is used. Keep body contact and splash to a minimum. Do not cut empty steel drums with a welding torch.
Leak & Spill Procedure:	Cover spill with absorbent material, remove from surface and place in open container. Spills may be a slipping hazard.
Water Disposal:	Any disposal practice must be in compliance with all Federal, State, Provincial and Local laws and regulations. Product as sold is not a RCRA hazardous waste when disposed.
Handling Procedures and Equipment:	Store containers upright, avoid eye and skin contact.
Storage Requirements:	Store at 50°F to 100°F.
Shipping Instructions:	None

Section VIII: First Aid Measures

Eyes:	Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. Obtain immediate medical attention.
Skin:	Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. Consult a physician if irritation develops.
Ingestion:	<u>Do Not Induce Vomiting.</u> Give victim large amounts of water to drink. Keep person warm, quiet and seek medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Aspiration or material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.
Inhalation:	If affected, move individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and seek immediate medical attention.