




## Material Data Sheet

		
Chemteq, Inc. 600 West 24 <sup>th</sup> Street, Suite B Norfolk, Virginia 23517, USA Tel: 757-622-2223 Toll-free: 855-CHEMTEQ (855-243-6837) info@chemteq.net	Material Data Sheet No. 27171885 Revision: 041121-A Part Number: 2717-1000 Description: Hydrazine Vapor Sorbent DG Product Name: Hydrazine Sorbent DG 2717	
<b>SECTION 1 – MATERIAL IDENTIFICATION</b>		
Ingredient	CAS #	% by Weight
Activated Carbon:	7440-44-0	35 -40
Hydrazine Sorbent blend	None	5-10 Trade Secret*
* The chemical composition the hydrazine Sorbent blend is considered a trade secret. As allowed in U.S. OSHA regulation 1910.1200 (i) (1), Chemteq, Inc. is withholding the specific chemical identity, including other specific identification information (e.g., CAS #).		
<b>SECTION 2 – HAZARDS IDENTIFICATION</b>		
Classification of substance or mixture: GHS-US classification Eye Irritant 2B H320, Ox. Sol. 2 H272, STOT SE 3 H335		
Label Elements Hazard pictograms GHS-US		
		
GHS07	GHS03	
Signal word (GHS-US): Danger Hazard statements (GHS-US) H320 – Causes eye irritation H272 – Intensify fire; oxidizer H335 – May cause respiratory irritation Precautionary statements (GHS- US) P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking P220 – Keep/Store away from clothing/... /combustible materials P221 – Take any precaution to avoid mixing with combustibles P261 – Avoid breathing dust/fume/gas/mist/vapours/spray P271 – Use only outdoors or in a well-ventilated area P280 –Wear protective gloves/protective clothing/eye protection/face protection P304+ 340 IF INHALED: Remove person to fresh air and keep comfortable for breathing P312 – Call a POISON CENTER/doctor P403+P233 Store in a well ventilated place. Keep container tightly closed P405 – Store locked up P501 – Dispose of contents according to Federal and local laws		
Fire & Explosion Hazards: Hazardous products of combustion including carbon oxides can occur when burned. Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Fight fire from a safe distance from a protected location. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion. Primary Route(s) of Exposure: Eye contact, skin contact, ingestion, or inhalation, are all possible routes of entry. Inhalation- Acute Effects: Inhalation of dust may cause sneezing, coughing, discomfort, and labored breathing. Skin Contact-Acute Effects: Dust may cause skin irritation. Eye Contact- Acute Effects: Dust that contacts eyes may cause redness, pain, blurred vision or mechanical injury.		

Ingestion-Acute Effects: Ingestion of powder may be irritating to the gastrointestinal tract.
<b>SECTION 3 – FIRST AID MEASURES</b>
<b>NECESSARY FIRST AID INSTRUCTIONS</b>
1. Eye Contact: Wash eyes immediately with plenty of water for at least 15 minutes and see a doctor. 2. Skin Contact: Wash affected area immediately with soap and water. 3. Inhalation: Not applicable 4. Ingestion: May be harmful if swallowed. Rinse mouth immediately with water and see a Doctor.
<b>SECTION 4 – FIRE FIGHTING MEASURES</b>
Flash Point/Method: Nonflammable Upper/Lower Explosion Limits: Not applicable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Fire Fighting Procedures: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full-face piece, operated in the positive pressure mode. Fire & Explosion Hazards: Hazardous products of combustion including carbon oxides can occur when burned. Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Fight fire from a safe distance from a protected location. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion. Hazardous Products of Decomposition and /or Combustion: Carbon oxides
<b>SECTION 5 – ACCIDENTAL RELEASE MEASURES</b>
Clean up spills in a manner, that does not disperse dust into the air. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal of material from eyes, skin, and clothing. Spent material should be disposed of in accordance with applicable laws. Do not reuse empty bags. <b>DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.</b> All disposal methods must comply with all Federal, State, Local and Provincial laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.
<b>SECTION 6 – HANDLING AND STORAGE</b>
Handling: Avoid dispersion into air. Keep containers dry and closed. Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones. Prevent or minimize exposures to dusts by using appropriate respirators, gloves, and eye protection. Wash exposed skin areas thoroughly with soap and water. Use caution when pouring, using pneumatic transport, swirling, etc. as this material can become electrostatically charged. Storage: Avoid breaking bags or spilling media to avoid possibly creating residual dust. Store in ambient atmospheric conditions. Product should be stored in a closed dry container. Maintain good housekeeping procedures. Store away from strong oxidizers such as; ozone, liquid oxygen, chlorine, permanganate, etc. General Comments: Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
<b>SECTION 7 – EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
Respiratory Protection: Use NIOSH/MSHA approved respiratory protection equipment appropriate to the material and/or its concentration where airborne exposure is likely. Skin Protection: Wear appropriate dust resistant clothing and gloves.

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<p>Eye Protection: Recommended are Safety glasses with side shields for any type of handling. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended.</p> <p>Ventilation Protection: Provide ventilation if necessary, to minimize exposure. Dilute ventilation acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment. The following publication offers ventilation guidelines and techniques: "INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICE" available from the ACGIH.</p> <p>Exposure Limits: Carbon: OSHA PEL-TWA: 15 mg/m<sup>3</sup> (total), 5 mg/m<sup>3</sup> (resp) OSHA PEL-STEL: 10 mg/m<sup>3</sup></p>											
<p><b>SECTION 8 - PHYSICAL/CHEMICAL PROPERTIES</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Vapor Pressure: Zero</td> <td style="width: 50%; border: none;">Vapor Density (Air=1): not applicable</td> </tr> <tr> <td style="border: none;">Boiling Point: not applicable</td> <td style="border: none;">Solubility in Water: &lt;15%</td> </tr> <tr> <td style="border: none;">Volatile Percentage: 0 %</td> <td style="border: none;">pH: not determined</td> </tr> <tr> <td style="border: none;">Flash Point/method: Nonflammable</td> <td style="border: none;">Auto Ignition Temperature: &gt;150°C</td> </tr> <tr> <td style="border: none;">Upper/Lower Explosion Limits: not applicable</td> <td style="border: none;">Other: none</td> </tr> </table>		Vapor Pressure: Zero	Vapor Density (Air=1): not applicable	Boiling Point: not applicable	Solubility in Water: <15%	Volatile Percentage: 0 %	pH: not determined	Flash Point/method: Nonflammable	Auto Ignition Temperature: >150°C	Upper/Lower Explosion Limits: not applicable	Other: none
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<p><b>SECTION 9 - STABILITY AND REACTIVITY</b></p> <p>Stability: This product considered stable under the specified conditions of storage, shipment and use.</p> <p>Incompatibilities: Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion. Avoid contact with strong acids.</p> <p>Polymerization: Hazardous polymerization will not occur.</p> <p>Decomposition: Hazardous decomposition will produce carbon oxides.</p>											
<p><b>SECTION 10 - TOXICOLOGICAL INFIRMATION</b></p> <p>INHALATION - Acute: Inhalation of dust may cause sneezing, coughing, discomfort, and laboured breathing. Inhalation of carbon dust is mildly irritating to the lungs and can immediately give rise to an increased mucociliary transport and airway resistance mediated by the vagus. The inhalation LC50 (rat) of carbon is &gt; 64.4 mg/l. INHALATION - Chronic: There are no known chronic inhalation effects.</p> <p>SKIN CONTACT - Acute: Dust may cause skin irritation. The primary skin irritation index (rabbit) of carbon is 0.</p> <p>SKIN CONTACT - Chronic: Repeated or prolonged contact with skin may cause dermatitis.</p> <p>EYE CONTACT - Acute: Dust that contacts eyes may cause redness, pain, blurred vision, or mechanical injury. Eye contact can cause conjunctivitis, epithelial hyperplasia of the cornea, as well as eczematous inflammation of the eyelids.</p> <p>INGESTION - Acute: Ingestion of powder may be irritating to the gastrointestinal tract with possible esophageal and gastric injuries. The probable oral lethal dose (human) of carbon is greater than 15 g/kg; more than one quart (2.2 lbs.) for a 70 kg (150 lb) person.</p> <p>INGESTION - Chronic: There are no known chronic ingestion effects.</p> <p>CARCINOGENICITY/MUTAGENICITY: There are no known carcinogenic/mutagenic effects.</p> <p>REPRODUCTIVE EFFECTS: There are no known reproductive effects.</p> <p>NEUROTOXICITY: There are no known neurotoxic effects.</p> <p>OTHER EFFECTS: No other toxic effects are known.</p> <p>TARGET ORGANS: Target organs include the skin, eyes, respiratory system and digestive tract</p>											
<p><b>SECTION 11 - ECOLOGICAL INFIRMATION</b></p> <p>May be hazardous to environment; special attention should be given to water organisms</p>											

<p><b>SECTION 12 - DISPOSAL CONSIDERATIONS</b></p> <p>Clean spills in a manner that does not disperse dust into the air, preferably a wet-down procedure or vacuum. If material is not contaminated, spilled media can be re-bagged. Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. Warning: Wet activated carbon depletes oxygen from the air and therefore dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen should be followed</p>			
<p><b>SECTION 13 - TRANSPORT INFORMATION</b></p> <p>DOT Shipping Description: see shipping papers</p>			
<p><b>SECTION 14 - REGULATORY INFORMATION</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%; border: none;">                 CERCLA SECTION 103 (40CFR302.4): No                  SARA SECTION 302 (40CFR355.30): No                  SARA SECTION 313 (40CFR372.65): No                  OSHA PROCESS SAFETY (29CFR19 10.119): No                  CALIFORNIA PROPOSITION 65: No             </td> <td style="width: 30%; border: none; vertical-align: top;">                 RQ: None                  SARA SECTION 304 (40CFR355.40): No                  SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):                  ACUTE: Yes, CHRONIC: No, FIRE: No,                  REACTIVE: No, SUDDEN RELEASE: No             </td> </tr> </table>		CERCLA SECTION 103 (40CFR302.4): No SARA SECTION 302 (40CFR355.30): No SARA SECTION 313 (40CFR372.65): No OSHA PROCESS SAFETY (29CFR19 10.119): No CALIFORNIA PROPOSITION 65: No	RQ: None SARA SECTION 304 (40CFR355.40): No SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21): ACUTE: Yes, CHRONIC: No, FIRE: No, REACTIVE: No, SUDDEN RELEASE: No
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<p><b>SECTION 15 - OTHER INFORMATION</b></p> <p>THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE PROVIDED FREE WITHOUT CHARGE SOLELY FOR TRAINED, QUALIFIED, TECHNICALLY COMPETENT, AND PROFESSIONAL COMMERCIAL, INDUSTRIAL, MILITARY, OR GOVERNMENT USERS AT THEIR DISCRETION AND RISK. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE BASED UPON DATA AND OTHER INFORMATION THAT CHEMTEQ BELIEVE TO BE CORRECT AND COMPLETE AS OF THE DATE ISSUED, BUT THE ACCURACY AND COMPLETENESS THEREOF IS NOT GUARANTEED AND NO WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE INFORMATION OR RECOMMENDATIONS CONTAINED IN THIS DOCUMENT. THE USER IS RESPONSIBLE FOR DETERMINING WHETHER THE PRODUCT OR COMPONENT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR THE USER'S METHOD OF USE OR APPLICATION. GIVEN THE VARIETY OF FACTORS THAT CAN AFFECT THE USE AND APPLICATION OF A PRODUCT OR COMPONENT, SOME OF WHICH ARE UNIQUELY WITHIN THE USER'S KNOWLEDGE OR CONTROL, IT IS ESSENTIAL THAT THE USER EVALUATE THE PRODUCT OR COMPONENT TO DETERMINE WHETHER THE PRODUCT OR COMPONENT IS FIT FOR A PARTICULAR PURPOSE AND ADDITIONALLY SUITABLE FOR USER'S METHOD OF USE OR APPLICATION AND SUITABLE FOR THE TEST SUBJECT. REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF THIS INFORMATION, HOWEVER, CHEMTEQ MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED WITH RESPECT TO THIS INFORMATION. CHEMTEQ MAKES NO REPRESENTATION AND ASSUMES NO LIABILITY FOR ANY DIRECT, OR INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM ITS USE.</p>			