

# Safety Data Sheet



Product name:

**Chemsorb® Multigard® 3500 Series**

Revised edition no: 665 - Rev D  
Date: 15 September 2017  
Supersedes: Revision edition no: 665 Rev C

Section 1	PRODUCT AND COMPANY IDENTIFICATION	
Product Name	Chemsorb® MultiGard® 3501, Chemsorb® MultiGard® 3502, Chemsorb® MultiGard® 3503, Chemsorb® MultiGard® 3504	
CAS Number	Mixture	
Product Use	Impregnated Adsorbent	
Supplier / Manufacturer's Name	Molecular Products Inc. (a subsidiary of Molecular Products Group) 6837 Winchester Circle, Boulder, CO, 80301, USA	
Emergency Contact	1-888-665-7763 (Hours: 7:00AM – 5:00PM Mountain Time)	
Date of Initial Preparation	03 February 2017	
Date of Previous Revision	16 February 2017	

Section 2	HAZARDS IDENTIFICATION	
Emergency Overview	This product is an amorphous black solid with no odor. Warning! Wet activated carbon removes oxygen from the air and can lower the concentration levels within confined spaces. Exposure can be irritating to eyes, respiratory system and skin. Harmful by inhalation and ingestion. It is a non-flammable solid. Excessive airborne dust creates a dust explosion hazard. The Environmental effects of this product have not been investigated; however, this product is not expected to have any adverse effects.	
GHS Hazard Symbols	N/A – Not Classified	
GHS Hazard Classification(s)	Not Classified	
Hazard Statement(s)	N/A – Not Classified	
Precautionary Statement(s)	N/A – Not Classified	
Other Hazard Information	This product contains substances that have a workplace exposure limit (WEL).	
Risk Phrases	None	
Safety Phrases	None	

Section 3	COMPOSITION AND INFORMATION ON INGREDIENTS			
Composition	Activated carbon, virgin coconut shell plus additives			
Substance name	Content	CAS No	Classification***	
Carbon, Activated	> 76%	7440-44-0	None	
Tris(hydroxymethyl) aminomethane	< 8%	77-86-1	None	
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).				

Section 4	FIRST-AID MEASURES	
Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.		
Eye Contact	If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if soreness or redness persists.	
Skin Contact	Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.	
Inhalation	If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.	

# Safety Data Sheet



Product name:

**Chemsorb<sup>®</sup> Multigard<sup>®</sup> 3500 Series**

Revised edition no: 665 - Rev D

Date: 15 September 2017

Supersedes: Revision edition no: 665 Rev C

Section 4	FIRST-AID MEASURES	
Ingestion	If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.	
Health Hazards or Risk from Exposure	<p><i>Acute:</i> Exposure to this product can be mildly irritating to eyes, respiratory system and skin</p> <p><i>Inhalation:</i> Avoid use in confined spaces. Wet activated carbon can adsorb and remove oxygen from the air causing a severe inhalation hazard to workers. Inhalation dust may cause nose, throat and respiratory tract irritation</p> <p><i>Eye:</i> May cause mechanical irritation as well as possible pain and redness</p> <p><i>Skin:</i> May cause irritation</p> <p><i>Ingestion:</i> May cause irritation to gastrointestinal tract</p> <p><i>Chronic:</i> None known</p>	
Target Organs	<p><i>Acute:</i> Eye, Respiratory System, Skin</p> <p><i>Chronic:</i> None known</p>	
Medical Conditions Aggravated by Exposure	Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact.	
Recommendations to Physicians	Treat symptoms and reduce over-exposure.	

Section 5	FIRE-FIGHTING MEASURES	
Flash Point	Non-Flammable	
Auto-Ignition Temperature	Not Applicable	
Flammable Limits (in air by volume, %)	<p><i>Lower (LEL):</i> Not Applicable</p> <p><i>Upper (UEL):</i> Not Applicable</p>	
Fire Extinguishing Materials	As appropriate for surrounding fire. Carbon dioxide, foam, dry chemical, halon, or water spray.	
Unusual Fire and Explosion Hazards	High dust concentration may form explosive mixtures with air, which can be ignited by spark, flame or static discharge.	
Explosion Sensitivity to Mechanical Impact	Not Sensitive	
Explosion Sensitivity to Static Discharge	Sensitive (Air/Dust mixtures)	
Special Fire-Fighting Procedures	Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray.	

Section 6	ACCIDENTAL RELEASE MEASURES	
Spill and Leak Response	Personnel should be trained for spill response	
Spill Response PPE	Coveralls, dust mask, safety glasses or goggles, nitrile gloves	
Clean up Procedure	Contain spill if safe to do so. Sweep, shovel or vacuum (HEPA vacuum) spilled material and place in an appropriate container for re-use or disposal. Avoid dust generation if possible. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).	

# Safety Data Sheet



Product name:

**Chemsorb<sup>®</sup> Multigard<sup>®</sup> 3500 Series**

Revised edition no: 665 - Rev D  
Date: 15 September 2017  
Supersedes: Revision edition no: 665 Rev C

Section 7		HANDLING AND STORAGE
Work Practices and Hygiene Practices	As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dusts generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately. Do not enter places where bulk material is used or stored until adequately ventilated to prevent asphyxiation. As with all finely divided materials, precautions should be taken to avoid inhalation and eye contact. Ground all transfer, blending and dust collecting equipment to prevent static discharge. Remove all ignition sources from material handling, transfer and processing areas where dust may be present.	
Storage and Handling Practices	Containers of this product must be properly labeled. Store containers in a cool, dry location away from heat, flame and incompatible materials. Keep container tightly closed when not in use. Avoid buildup of static charge in handling equipment.	
Incompatible Materials	Avoid contact with strong oxidizing agents, strong acids.	

Section 8		EXPOSURE CONTROLS / PERSONAL PROTECTION		
Exposure Limits/Guidelines	Either local exhaust or general room ventilation is usually required			
<b>Chemical Name</b>	<b>CAS #</b>	<b>ACGIH TWA</b>	<b>OSHA TWA</b>	
Carbon, Activated	7440-44-0	10 mg/m <sup>3</sup> Dust	15 mg/m <sup>3</sup> Total Dust 5 mg/m <sup>3</sup> Respirable Fraction	
Tris (hydroxymethylaminomethane)	77-86-1	N/A	N/A	
Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place.				
Ventilation and Engineering Controls				
Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.				
Personal Protective Equipment				
The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.				
Respiratory Protection	Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard, equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.			
Eye protection	Safety glasses or chemical goggles are recommended. If necessary, refer to U.S. OSHA or appropriate Canadian Standards.			
Hand Protection	Use protective gloves to minimize skin contact. If necessary, refer to U.S. OSHA or appropriate Standards of Canada.			
Body Protection	Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.			

Section 9		PHYSICAL AND CHEMICAL PROPERTIES
Physical State	Amorphous solid	
Appearance and Odor	Black Solid with no odor	
Odor Threshold (PPM)	None	
Vapor Pressure (mmHg)	Not Applicable	

# Safety Data Sheet



Product name:

**Chemsorb<sup>®</sup> Multigard<sup>®</sup> 3500 Series**

Revised edition no: 665 - Rev D  
Date: 15 September 2017  
Supersedes: Revision edition no: 665 Rev C

Section 9	PHYSICAL AND CHEMICAL PROPERTIES	
	Vapor Density (AIR=1)	Not Applicable
	Density	0.25 – 1.0 g/ml
	Evaporation Rate (nBuAc=1)	Not Applicable
	Boiling Point (°C)	Not Applicable
	Freezing Point (°C)	Not Applicable
	pH	No data available
	Specific Gravity 4° C (Water=1)	0.25 – 1.0
	Solubility in Water (%)	Insoluble
	VOC	0
	Upper Explosive Limit	Not Applicable
	Lower Explosive Limit	Not Applicable
	Flammability	Not Applicable
	Partition Coefficient	Not Applicable
	Decomposition Temperature	Not Determined
	Viscosity	Not Applicable

Section 10	STABILITY AND REACTIVITY	
	Stability	Product is stable
	Decomposition Products	Thermal decomposition (burning) may produce irritating and toxic fumes of carbon (carbon dioxide, carbon monoxide), and oxides nitrogen.
	Materials with which Substance is Incompatible	Avoid contact with strong oxidizing agents, strong acids.
	Hazardous Polymerization	Will not occur
	Conditions to Avoid	Contact with incompatible materials and dust generation

Section 11	TOXICOLOGICAL INFORMATION	
	Toxicity: There is no available data for the product, only for the ingredients.	
	CAS# 7440-44-0 LC50, Inhalation – Rat	>64,400 mg/m <sup>3</sup>
	CAS# 7440-44-0 LD50, Oral - Rat	>10,000 mg/kg
	CAS# 77-86-1 LD-50, Oral-Rat	> 3,000mg/kg
	CAS# 77-86-1 LD-50, Dermal- Rat	> 5,000 mg/kg
	Suspected Cancer Agent	None of the ingredients are found on the following lists: NTP, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.
	Irritancy	Contact with this product can be irritating to exposed skin, eyes and respiratory system.
	Sensitization	This product is not considered a sensitizer.
	Reproductive Toxicity	No information concerning the effects of this product and its components on the human reproductive system.
	Health Hazards or Risks from Exposure	<p><i>Acute:</i> Exposure to this product can be mildly irritating to eyes, respiratory system and skin.</p> <p><i>Inhalation:</i> Avoid use in confined spaces. Wet activated carbon can adsorb and remove oxygen from the air causing a severe inhalation hazard to workers. Inhalation of dusts may cause nose, throat and respiratory tract irritation and possible lung damage.</p> <p><i>Eye:</i> May cause mechanical irritation with pain and redness.</p> <p><i>Skin:</i> May cause irritation.</p> <p><i>Ingestion:</i> May cause irritation to gastrointestinal tract.</p> <p><i>Chronic:</i> None known</p>

# Safety Data Sheet



Product name:

**Chemsorb<sup>®</sup> Multigard<sup>®</sup> 3500 Series**

Revised edition no: 665 - Rev D  
Date: 15 September 2017  
Supersedes: Revision edition no: 665 Rev C

Section 11	TOXICOLOGICAL INFORMATION	
	Target Organs	Acute: Eye, Respiratory System, Skin Chronic: None known
	CAS# 7440-44-0 LC50, Inhalation – Rat	>64,400 mg/m <sup>3</sup>
	CAS# 7440-44-0 LD50, Oral - Rat	> 10,000 mg/kg
	CAS# 77-86-1 LD-50, Oral-Rat	> 3,000mg/kg

Section 12	ECOLOGICAL INFORMATION	
	All work practices must be aimed at eliminating environmental contamination.	
	Environmental Stability	The ecological characteristics of this product have not been fully investigated. The product should not be discharged unmonitored into the environment.
	Effect of Material on Plants or Animals	No evidence is currently available on this product's effects on plants or animals.
	Effect of Chemical on Aquatic Life	No Data Available for this product at this time.
	<i>Note: This product is readily biodegradable and is not expected to bio-accumulate</i>	

Section 13	DISPOSAL CONSIDERATIONS	
	Preparing Wastes for Disposal	Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

Section 14	TRANSPORTATION INFORMATION	
	U.S. DOT, IATA, IMO, and ADR	THIS PRODUCT* IS NOT HAZARDOUS AS DEFINED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
	<b>*Note:</b> Carbons made by steam activation process are not subject to the provision of UN Class 4.2	
	Proper Shipping Name	Non-regulated material
	Hazard Class Number and Description	Not Applicable
	U.N. Identification Number	Not Applicable
	Packing Group	Not Applicable
	DOT Label(s) Required	Not Applicable
	North American Emergency Response Guidebook Number (2004)	Not Applicable
	Marine Pollutant	None of the ingredients are classified by the DOT as a Marine Pollutant
	This product is NOT considered spontaneously combustible under the "Self-Heating Test for Carbon" protocol listed in the United Nations' Manual of Tests and Criteria [33.3.1].	
	U.S. Department of Transportation (DOT) Shipping Regulations	This product is not classified as dangerous goods, per U.S. DOT regulations,
	Transport Canada, Transportation of Dangerous Goods Regulation	This product is not classified as Dangerous Goods, per regulations of Transport Canada.
	International Air Transport Association (IATA)	This product is not classified as Dangerous Goods, by rules of IATA: Not restricted per Special Provision A3
	International Maritime Organization (IMO) Designation:	This product is not classified as Dangerous Goods by the International Maritime Organization.
	European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)	This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

# Safety Data Sheet



Product name:

**Chemsorb<sup>®</sup> Multigard<sup>®</sup> 3500 Series**

Revised edition no: 665 - Rev D  
Date: 15 September 2017  
Supersedes: Revision edition no: 665 Rev C

Section 15	REGULATORY INFORMATION	
	United States Regulations	
	SARA Reporting Requirements	This product is not subject to the reporting requirements of the Superfund Amendments and Reauthorization Act., as follows:
	Toxic Control Substance Act (TCSA)	All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.
	SARA 311/312	<i>Acute Health: Yes</i> <i>Chronic Health: No</i> <i>Fire: No</i> <i>Reactivity: No</i>
	SARA 313	This product does not contain any components that exceed the reporting threshold established by Superfund Amendments and Reauthorization Act
	U.S. SARA Threshold Planning Quantity	There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply,
	U.S. CERCLA Reportable Quantity (RQ)	CERCLA Reportable Quantity (RQ), None.
	Clean Water Act (CWA)	None of the chemicals in this product are listed as Hazardous Substances under the CWA.
	State Regulations	CAS# 77-86-1 can be found on the following state right to know lists: New Jersey and Pennsylvania
	California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)	None of the ingredients are on the California Proposition 65 lists.
	Canadian Regulations	
	Canadian DSL/NDSL Inventory Status	All of the components of this product, except for Carbon, Activated, 7440-44-0 are on the DSL Inventory
	Canadian Environmental Protection Act (CEPA) Priorities Substances Lists	No component of this product is on the CEPA First Priorities Substance Lists.

Section 16	OTHER INFORMATION	
	Prepared By	Hellman & Associates, Inc.
	Disclaimer: The information in this safety data sheet is based on the best knowledge available at the time and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application. As the specific conditions of use are outside the control of the supplier, the user is responsible for ensuring that the product is used in a safe way and in compliance with the relevant requirements of legislation.	
	Date of issue	15 September 2017