

Product name

Chemsorb® Multigard® 3500 Series



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

i '	This product is an amorphous black solid with no odor. Warning! Wet activated carbon removes
Emergency Overview	oxygen from the air and can lower the concentration levels within confined spaces. Exposure can lirritating 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 effect 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

Composition	Activated carbon, virgin cocor	nut shell plus additives	
Substance name	Content	CAS No	Classification
Carbon, Activated	> 76%	7440-44-0	None
Tris(hydroxymethl) aminomethane	< 8%	77-86-1	None

Section	FIRST-AID MEASURES	
	Contaminated individuals of chemical experts for medical attention, if necessary. Take of	osure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken opy 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.

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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 dilue (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. So medical advice. Take a copy of the label and/or SDS with the victim to the health professional.
Health Hazards or Risk from Exposure	Acute: Exposure to this product can be mildly irritating to eyes, respiratory system and skin Inholation: 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. Eye: May cause mechanical irritation as well as possible pain and redness Skin: May cause irritation Ingestion: May cause irritation to gastrointestinal tract Chronic None known
Target Organs	Acute: Eye, Respiratory System, Skin Chronic: None known
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	FIRE-FIGHTING MEASURES	
	Flash Point	Non-Flammable
	Auto-Ignition Temperature	Not Applicable
	Flammable Limits (in air by volume, %)	Lower (LEL): Not Applicable Upper (UEL): Not Applicable
	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 ACCIDENTAL RELEASE ME	ASURES
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).

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Section HANDLING AF	ID STORAGE	To provide the control of the contro
Work Practices an	d 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 Handi	ing 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 Mate	rials	Avoid contact with strong oxidizing agents, strong acids.

Section 8	EXPOSURE CONTROLS / PERSO	NAL PROTECTION	en. En l'estre de la laction de la constant		
	Exposure Limits/Guidelines	Either local exhaust or general room ventilation is usually required			
aja jerizmani.	Chemical Name	CAS#	ACGIH TWA	OSHA TWA	
	Carbon, Activated	7440-44-0	10 mg/m³ Dust	15 mg/m³ Total Dust 5 mg/m³ Respirable Fraction	
	Tris (hydroxymethylaminomethane)	77-86-1	N/A	N/A	
	Currently, International exposure limits country for the most recent limits in plan	are established for the component ce.	s of this product. Please check wit	h competent authority in each	
	Ventilation and Engineering Controls			ngang Ardadaganasak (144 mg 2015)	
	Use with adequate ventilation to ensure airborne dust. Ensure eyewash/safety sho	exposure levels are maintained be ower stations are available near are	low the limits provided above. Use eas where this product is used.	a local exhaust ventilation to control	
	Personal Protective Equipment				
	The following information on appropriate equivalent standard of Canada, or standa those of Japan. Please reference applicable	ros of EU member states (includin	PEN 149 for respiratory PPF and	omplying with OSHA regulations or EN 166 for face/eye protection), and	
	Respiratory Protection	Maintain airborne contaminant concentrations below guidelines listed above, if applicable. It necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respirator 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 gog appropriate Canadian Standar	gles are recommended. If necessards.	ry, refer to U.S. OSHA or	
	Hand Protection	Use protective gloves to mini Standards of Canada.	mize skin contact. If necessary, rei	fer to U.S. OSHA or appropriate	
	Body Protection	Use body protection appropriate Standards of Can relevant Japanese Standards.	iate to prevent contact (e.g. lab co ada, or appropriate Standards of t	pat, overalls). If necessary, refer to the EU, Australian Standards, or	

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

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PHYSICAL AND CHEMICAL PR	OPERTIES TO THE PROPERTY OF TH
Vapor Density (AIR=I)	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
рН	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

ection ST	ABILITY AND REACTIVITY	
Stab	ility	Product is stable
Dec	omposition Products	Thermal decomposition (burning) may produce irritating and toxic fumes of carbon (carbon dioxic carbon monoxide), and oxides nitrogen.
	erials with which Substance is empatible	Avoid contact with strong oxidizing agents, strong acids.
Hazz	ardous Polymerization	Will not occur
Con	ditions to Avoid	Contact with incompatible materials and dust generation

Section TOXICOLOGICAL INFORMATION	We consider the constraint of the $x_i$ and $x_i$ is the $x_i$ and $x_i$ and $x_i$ and $x_i$ is the $x_i$
Toxicity: There is no available data for the	product, only for the ingredients.
CAS# 7440-44-0 LC50, Inhalation – Rat	>64,400 mg/m²
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	Acute: Exposure to this product can be mildly irritating to eyes, respiratory system and skin.  Inholation: 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.  Eye: May cause mechanical irritation with pain and redness.  Skin: May cause irritation.  Ingestion: May cause irritation to gastrointestinal tract.  Chronic: None known

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tion TOXICOLOGICAL INFORMATIO	
Target Organs	Acute: Eye, Respiratory System, Skin Chronic: None known
CAS# 7440-44-0 LC50, Inhalation - Rat	>64,400 mg/m³
CAS# 7440-44-0 LD50, Oral - Rat	>10,000 mg/kg
CAS# 77-86-1 LD-50, Oral-Rat	> 3,000mg/kg

Section 12	IECOLOGICAL INFORMATION	
	All work practices must be aimed at elimi	inating 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.
	Note: This product is readily biodegradable an	od is not expected to bio-accumulate

Section 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.

TRANSPORTATION INFORMATIO	DN
U.S. DOT, IATA, IMO, and ADR	THIS PRODUCT* IS NOT HAZARDOUS AS DEFINED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
*Note: 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 spontane Manual of Tests and Criteria [33.3.1].	eously combustible under the "Self-Heating Test for Carbon" protocol listed in the United Nation
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.

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	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	Acute Health: Yes Chronic Health: No Fire: No Reactivity: No
	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.

Prepared By	Hellman & Associates, Inc.
suitability for particular appl	n in this safety data sheet is based on the best knowledge available at the time and current legislation. It provide nd environmental aspects of the product and should not be construed as any guarantee of technical performanc lication. As the specific conditions of use are outside the control of the supplier, the user is responsible for en a safe way and in compliance with the relevant requirements of legislation.
Date of issue	