

MATERIAL/CHEMICAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Details

Product Name: Graphite-based, Conductive Mounting Powder

Allied Item No.: 155-20010/15

Chemical Name: Phenol-formaldehyde polymeric molding compound

Company Identification

Allied High Tech Products, Inc.
2376 East Pacifica Place
Rancho Dominguez, CA 90220
(310) 635-2466

Contact Point

Transportation for United States
Chemtrec (800) 424-9300 * (202) 483-7616

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	CAS No.	Exposure Limits in Air		Carcin. Y/N
		ACGIH TLV or TWA	OSHA PEL	
Phenol <6.3%	108-95-2	5ppm	5ppm	
Carbon Black <12%	1333-86-4	3.5 mg/m ³	3.5 mg/m ³	Y
Coal Dust <18%	N/A	2 mg/m ³	2.4 mg/m ³	
Graphite <40%	7782-42-5	2 mg/m ³	15 mppcf	
Mica <60%	12001-26-2	3 mg/m ³	20 mppcf	
Talc <20%	14807-96-6	2 mg/m ³	20 mppcf	
Particulates not otherwise classified, <70%	N/A	10 mg/m ³	15 mg/m ³	
		<i>Inhaled</i> 3 mg/m ³	<i>Total</i> 5 mg/m ³	
		<i>Respirable</i>	<i>Respirable</i>	

Compound As Used:

During polymerization (e.g., curing of the product) or decomposition (e.g., overheating or burning of the product), small amounts of gaseous ammonia, phenol and formaldehyde (as well as water vapor, carbon monoxide and carbon dioxide) are evolved. Breathing of the fumes can be harmful. If the odor of ammonia or formaldehyde is noticeable, then the airborne concentration of these chemicals should be carefully monitored and ventilation improvements considered. These chemicals begin to be detectable by odor at concentrations approaching or exceeding the PEL. The odor of phenol begins to be noticeable at a concentration about 1/5th the PEL. In any case, adequacy of ventilation can best be determined by use of instruments to monitor airborne concentrations of ammonia, phenol and formaldehyde. **Grinding or machining of cured molded material may create a dust that poses a respiratory hazard if inhaled and may release small amounts of gaseous ammonia.**

Ingredients are listed on the TSCA Inventory of Chemical Substances. Those not identified are non-hazardous.

HMIS Ratings

Health: 2
Flammability: 1
Reactivity: 0

SECTION 3: HAZARDS IDENTIFICATION

Hazard Statement:

The product is a plastic molding compound. When fully "cured" or reacted, the plastic resin is insoluble, infusible and binds the well-dispersed filling materials. However, "as sold" the plastic resin contains some unreacted ingredients dissolved within it. These chemicals are extremely unlikely to pose a hazard; but because they are hazardous in their pure forms, OSHA requires that they are reported and described as hazardous ingredients. Under normal storage and handling, no significant amount of hazardous vapors should evolve from the "as sold" product. The great majority of the filling materials are embedded within compound granules that are large enough not to constitute an inhalation hazard. Some particles of plastic resin and/or fillers may be present in a size that constitutes respirable dust. This dust may contain one or more of: carbon black, coal dust, fibrous glass, graphite, mica, mineral wool fiber, talc and/or wood flour (soft). Chronic inhalation can cause fibrotic lung disease and an increase of lung cancer - especially in smokers. Inhalation of dust should be avoided with good ventilation and respirators. The primary acute health risk from the "as sold" product is irritation, especially from dust. Ingestion, inhalation and eye contact should be avoided.

SECTION 4: FIRST AID MEASURES

	Potential Health Effects	First Aid/Medical Info.
Eye Contact:	Dust and vapors may cause irritation.	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact:	May cause irritation and/or allergic reactions in sensitized individuals.	Immediately wash skin with plenty of water and water.
Inhalation:	May cause severe irritation to the nose, throat and respiratory tract. Can cause pneumoconiosis.	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Not expected under normal conditions of use.	If conscious, give water immediately and induce vomiting. Get medical attention.

Note:

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Water spray (fog), foam, dry chemical or carbon dioxide

Fire Fighting Instruction: Wear full protective clothing and OSHA/NIOSH self-contained breathing apparatus with full facepiece.

Special Hazards: Organic dust/air mixtures are highly flammable (explosive); avoid dust accumulations or dust-laden atmospheres and sources of ignition.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Vacuum (with explosive-proof motor) or sweep with sawdust or sand. Avoid generating dust. Do not allow to enter waterways.

<p>SECTION 7: HANDLING & STORAGE</p>	<p>SECTION 12: ECOLOGICAL INFORMATION</p>			
<p>Handling: Use only with adequate ventilation. Avoid breathing fumes from molding or other processes involving heat. Avoid breathing dust from cutting, machining or deflashing operations. Avoid high concentrations of dust in air and accumulation on equipment. Fine dust of this material in heavy concentrations can create a dust explosion hazard. Wash thoroughly after handling.</p> <p>Storage: Keep in a cool, well-ventilated area away from heat, sparks and open flame. Prevent dust accumulations. Observe good housekeeping practices.</p>	<p>No data available for this product.</p>			
<p>SECTION 8: EXPOSURE CONTROL & PERSONAL PROTECTION</p>	<p>SECTION 13: DISPOSAL INFORMATION</p>			
<p>Engineering Measures: Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Special ventilation procedures may be required to avoid explosion hazards if dust situation exists. Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.</p> <p>Respiratory Protection: Use OSHA/NIOSH approved respiratory protection if level of air contaminants is excessive.</p> <p>Protective Gloves: Impervious is recommended to prevent skin contact.</p> <p>Eye Protection: Safety glasses with side shields or chemical splash goggles.</p> <p>Other: Eyewash, safety shower and impervious clothing are recommended.</p>	<p>Dispose of waste material according to Federal, State and Local regulations.</p>			
<p>SECTION 9: PHYSICAL & CHEMICAL PROPERTIES</p>	<p>SECTION 14: TRANSPORT INFORMATION</p>			
<p>Appearance: Black powder/granules Odor: Slight Phenol Solubility: Negligible Boiling Point: NA Melting Point: NE Flash Point: None Vapor Pressure: NA Vapor Density: NA Evaporation Rate: NA Specific Gravity: 1.75-2.05 Flammable Limits LEL: Dust .030 oz/per cubic foot Flammable Limits UEL: NE VOC content: NA</p>	<p>Not regulated. Non-hazardous for transportation.</p>			
<p>SECTION 10: STABILITY & REACTIVITY</p>	<p>SECTION 15: REGULATORY INFORMATION</p>			
<p>Conditions to Avoid/Incompatibles: Strong oxidizing agents - may decompose or ignite when mixed with same. High temperatures (over 100°). Avoid creating dust as it may form explosive mixture in the air.</p> <p>Decomposition Products: At elevated temperatures: ammonia, phenol, formaldehyde, water vapor, carbon monoxide and carbon dioxide.</p> <p>Hazardous Polymerization: Should not occur.</p>	<p>Toxic Substance Control Act TSCA: All ingredients are TSCA listed, or are exempt.</p> <p>CERCLA/SARA 313: Release of phenol above RQ level requires reporting</p> <p>SARA TITLE III: Release of phenol above RQ level requires reporting</p> <p>311/312 Hazard Categories: Release of phenol and carbon black may require reporting depending on the amount of this product used.</p> <p>California Proposition 65: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.</p> <p>This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Right-to-Know Act of 1986 and 40 CFR 372:</p> <table border="0"> <tr> <td>Phenol</td> <td>CAS#108-95-2</td> <td><7 percent by weight</td> </tr> </table>	Phenol	CAS#108-95-2	<7 percent by weight
Phenol	CAS#108-95-2	<7 percent by weight		
<p>SECTION 11: TOXICOLOGICAL INFORMATION</p>	<p>SECTION 16: OTHER INFORMATION</p>			
<p>IARC, OSHA, NTP have determined that carbon black is a carcinogen based on laboratory studies.</p> <p>Carbon black and formaldehyde are listed under California's Proposition 65 as human carcinogens.</p>	<p>Legend NAIF: No Applicable Information Found NA: Not Available/Applicable NE: None Established</p> <p>DISCLAIMER: The above information and recommendations are believed accurate and reliable. Because it is not possible to anticipate all conditions of use, additional safety precautions may be required. ALLIED HIGH TECH PRODUCTS, INC. makes no warranty, either express or implied, as to its accuracy or completeness and none is made as to the fitness of this material for any purpose. The manufacturer/distributor shall not be liable for damages to person or property resulting from its use. Nothing herein shall be construed as a recommendation for use in violation of any patent.</p> <hr/> <p>Form Prepared By: Allied High Tech Products, Inc. January 2011</p>			
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