

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/16/2020

Version 4.1

Last revision 06/16/2020

1 Identification

- **Product name:** Conductive Mounting Powder, Graphite-based
- **Part number:** 155-20010, 155-20015
- **Application of the substance / the mixture** Thermoset molding
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Allied High Tech Products Inc.
2376 East Pacifica Place
USA-RANCHO DOMINGUEZ, CA 90220
USA
info@alliedhightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**
During normal opening times: +1 (310) 635-2466
Chemtrec: +1 (202) 483-7616

*** 2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Combustible Dust May form combustible dust concentrations in air.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Warning

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· Hazard-determining components of labeling:Carbon black
methenamine**· Hazard statements**Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.
May form combustible dust concentrations in air.**· Precautionary statements**Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.*** 3 Composition/information on ingredients****· Chemical characterization: Mixtures****· Description:** Mixture of the substances listed below with nonhazardous additions.**· Hazardous components and components with occupational exposure limits:**

12001-26-2	Mica	10-25%
1332-58-7	Kaolin	10-25%
7782-42-5	Graphite	10-25%
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	10-25%
	Wood flour	10-25%
	Coal dust	1-10%
1333-86-4	Carbon black	1-10%
	⚠ Self-heat. 2, H252; ⚠ Carc. 2, H351	
100-97-0	methenamine	1-10%
	⚠ Flam. Sol. 2, H228; ⚠ Skin Sens. 1, H317	
1305-62-0	calcium dihydroxide	1-<3%
	⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318	
108-95-2	phenol	<1%
	⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Muta. 2, H341; STOT RE 2, H373; ⚠ Skin Corr. 1B, H314	
50-00-0	formaldehyde	<0.1%
	⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Muta. 2, H341; Carc. 1B, H350; ⚠ Skin Corr. 1B, H314; ⚠ Skin Sens. 1, H317; Flam. Liq. 4, H227	

· Non-hazardous components:

9003-35-4	Phenolic Polymer	25-50%
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· Additional information: The specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret.

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* 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Breathing difficulty
Coughing
Allergic reactions
Dermatitis
Eye irritation
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Water spray
Fire-extinguishing powder
Alcohol resistant foam
Carbon dioxide
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store at temperatures not exceeding 30°C.
Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.

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- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store receptacle in a well ventilated area.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:

12001-26-2 Mica	
PEL	Long-term value: 20 mppcf ppm <1% crystalline silica
REL	Long-term value: 3* mg/m ³ *respirable dust; containing < 1% quartz
TLV	Long-term value: 3* mg/m ³ *as respirable fraction
1332-58-7 Kaolin	
PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 2* mg/m ³ E; as respirable fraction
7782-42-5 Graphite	
PEL	Long-term value: 15 mppcf* mg/m ³ *impinger samples counted by light field techn.
REL	Long-term value: 2.5* mg/m ³ *respirable dust
TLV	Long-term value: 2* mg/m ³ all forms except graphite fibers;*resp. fraction
14807-96-6 Talc (Mg₃H₂(SiO₃)₄)	
PEL	Long-term value: 20 mppcf ppm (containing <1% Quartz)
REL	Long-term value: 2* mg/m ³ *respirable dust; and <1% Quartz
TLV	Long-term value: 2* mg/m ³ *as respirable fraction; E
Wood flour	
PEL	Long-term value: 15 mg/m ³
TLV	Long-term value: 1 mg/m ³
Coal dust	
PEL	Long-term value: 10 mg/m ³
TLV	Long-term value: 2 mg/m ³
1333-86-4 Carbon black	
PEL	Long-term value: 3.5 mg/m ³
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs
TLV	Long-term value: 3* mg/m ³ *inhalable fraction

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100-97-0 methenamine	
TLV	Long-term value: NIC-1* mg/m ³ *inhalable fraction, NIC-A4, NIC-DSEN
1305-62-0 calcium dihydroxide	
PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³
108-95-2 phenol	
PEL	Long-term value: 19 mg/m ³ , 5 ppm Skin
REL	Long-term value: 19 mg/m ³ , 5 ppm Ceiling limit value: 60* mg/m ³ , 15.6* ppm *15-min; Skin
TLV	Long-term value: 19 mg/m ³ , 5 ppm Skin; BEI
50-00-0 formaldehyde	
PEL	Short-term value: 2 ppm Long-term value: 0.75 ppm see 29 CFR 1910.1048(c)
REL	Long-term value: 0.016 ppm Ceiling limit value: 0.1* ppm *15-min
TLV	Short-term value: 0.37 mg/m ³ , 0.3 ppm Long-term value: 0.12 mg/m ³ , 0.1 ppm DSEN; RSEN
· Ingredients with biological limit values:	
108-95-2 phenol	
BEI	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)

· Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

· Breathing equipment: Use suitable respiratory protective device when high concentrations are present.**· Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Powder
Color:	Black
· Odor:	Phenol-like
· Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.4 %
VOC content:	0.43 %
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
Keep away from heat.
Keep away from open flames. - No smoking.
Keep away from oxidising agents and acidic substances.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Formaldehyde
Phenol
Ammonia
Carbon monoxide and carbon dioxide
- **Additional information:** Hazardous decomposition products may form during combustion.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4 h	>20 mg/l
1333-86-4 Carbon black		
Oral	LD50	10,000 mg/kg (rat)
1305-62-0 calcium dihydroxide		
Oral	LD50	7,340 mg/kg (rat)
108-95-2 phenol		
Oral	LD50	317 mg/kg (rat)
Dermal	LD50	850 mg/kg (rabbit)
Inhalative	LC50/4 h	0.5 mg/l (ATE)
50-00-0 formaldehyde		
Oral	LD50	>200 mg/kg (rat)
Dermal	LD50	270 mg/kg (rabbit)
Inhalative	LC50/4 h	3 mg/l (ATE)

- **Primary chemical irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	3
1333-86-4	Carbon black	2B
108-95-2	phenol	3
50-00-0	formaldehyde	1
· NTP (National Toxicology Program)		
50-00-0	formaldehyde	K
· OSHA-Ca (Occupational Safety & Health Administration)		
50-00-0	formaldehyde	

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Contact waste processors for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · DOT, ADN, IMDG, IATA	not regulated
· UN proper shipping name · DOT, ADN, IMDG, IATA	not regulated
· Transport hazard class(es) · DOT, ADN, IMDG, IATA · Class	not regulated
· Packing group · DOT, IMDG, IATA	not regulated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

*15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):	
108-95-2	phenol
50-00-0	formaldehyde
· Section 313 (Specific toxic chemical listings):	
108-95-2	phenol

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50-00-0	formaldehyde	
· TSCA (Toxic Substances Control Act): All other ingredients are exempt from listing.		
9003-35-4	Phenolic Polymer	ACTIVE
1332-58-7	Kaolin	ACTIVE
7782-42-5	Graphite	ACTIVE
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	ACTIVE
1333-86-4	Carbon black	ACTIVE
100-97-0	methenamine	ACTIVE
1305-62-0	calcium dihydroxide	ACTIVE
108-95-2	phenol	ACTIVE
50-00-0	formaldehyde	ACTIVE
· Hazardous Air Pollutants		
108-95-2	phenol	
50-00-0	formaldehyde	
· Proposition 65		
· Chemicals known to cause cancer:		
1333-86-4	Carbon black	
50-00-0	formaldehyde	
· Chemicals known to cause reproductive toxicity for females:		
None of the ingredients is listed.		
· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients is listed.		
· Chemicals known to cause developmental toxicity:		
None of the ingredients is listed.		
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.		

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Dermit
- **Last revision / supersedes version:** 06/16/2020 / 4.0
- **Supersedes date:** 04/30/2020
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - BEL: Biological Exposure Limit
 - Flam. Liq. 4: Flammable liquids – Category 4
 - Flam. Sol. 2: Flammable solids – Category 2
 - Self-heat. 2: Self-heating substances and mixtures – Category 2

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Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1B: Carcinogenicity – Category 1B
Carc. 2: Carcinogenicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

*** Data compared to the previous version altered.**