

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/01/2022

Version 5.0

Last revision 06/01/2022

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

Carcinogenicity 2 H351 Suspected of causing cancer.



GHS07

Skin Irritation 2 H315 Causes skin irritation.
Eye Irritation 2A H319 Causes serious eye irritation.
Sensitization - Skin 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	10-20%
1332-58-7	Kaolin	10-20%
7782-42-5	Graphite	10-20%
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	10-20%
	Wood flour	10-20%
	Coal dust	5-10%
1333-86-4	Carbon black	1-5%
	⚠ Self-heating substances and mixtures 2, H252; ⚠ Carcinogenicity 2, H351	
100-97-0	methenamine	1-5%
	⚠ Flammable Solids 2, H228; ⚠ Sensitization - Skin 1, H317	
1305-62-0	calcium dihydroxide	1-<3%
	⚠ Skin Corrosion 1B, H314; Eye Damage 1, H318	
108-95-2	phenol	<1%
	⚠ Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331; ⚠ Germ Cell Mutagenicity 2, H341; Specific Target Organ Toxicity - Repeated Exposure 2, H373; ⚠ Skin Corrosion 1B, H314	
50-00-0	formaldehyde	<0.1%
	⚠ Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331; ⚠ Germ Cell Mutagenicity 2, H341; Carcinogenicity 1B, H350; ⚠ Skin Corrosion 1B, H314; ⚠ Sensitization - Skin 1, H317; Flammable Liquids 4, H227	

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· Non-hazardous components:		
9003-35-4	Phenolic Polymer	40-50%

· **Additional information:** The specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret.

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:** No special measures required.

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- **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.
- **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: 0.1* mg/m ³ *resp. 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, A4
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 *no asbestos fibers, resp. particulate matter, E, A4
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

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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; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m ³ *inhalable fraction, A3
100-97-0 methenamine	
TLV	Long-term value: 1* mg/m ³ *inhalable fraction, A4, 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, A4
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; See Pocket Guide App. A
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, A1
· 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.

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· **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.

· **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.

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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.
- **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	81,282 mg/kg (rat)
Dermal	LD50	217,949 mg/kg (rabbit)
Inhalative	LC50/4 h	128 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.

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· **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
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· **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.

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· 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
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:** Technical Services
- **Contact:** Pablo Mendoza
- **Last revision / supersedes version:** 06/01/2022 / 4.1
- **Supersedes date:** 05/18/2021

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· **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
- BEI: Biological Exposure Limit
- Flammable Liquids 4: Flammable liquids – Category 4
- Flammable Solids 2: Flammable solids – Category 2
- Self-heating substances and mixtures 2: Self-heating substances and mixtures – Category 2
- Acute Toxicity - Oral 3: Acute toxicity – Category 3
- Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
- Skin Irritation 2: Skin corrosion/irritation – Category 2
- Eye Damage 1: Serious eye damage/eye irritation – Category 1
- Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
- Sensitization - Skin 1: Skin sensitisation – Category 1
- Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2
- Carcinogenicity 1B: Carcinogenicity – Category 1B
- Carcinogenicity 2: Carcinogenicity – Category 2
- Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

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