

## Safety Data Sheet acc. to OSHA HCS

Printing date 04/04/2016

Reviewed on 04/04/2016

### 1 Identification

- **Product name:** Diamond Tools - Very Fine and Fine, Metal Bond
- **Part number:**  
15-92VFMB0.70 - 15-92VFMB5.0  
15-92FMB0.7 - 15-92FMB3.0  
15-92MMB1.0 - 15-92MMB3.0  
15-92CMB3.0
- **Application of the substance / the mixture** Abrasive
- **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

- Muta. 2 H341 Suspected of causing genetic defects.  
Carc. 2 H351 Suspected of causing cancer.  
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



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.

- **Additional information:** Based on health effects for dust

- **Label elements**

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

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· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*nickel*  
*phenol*  
*titanium dioxide*

· **Hazard statements**

*Causes skin irritation.*  
*Causes serious eye irritation.*  
*May cause an allergic skin reaction.*  
*Suspected of causing genetic defects.*  
*Suspected of causing cancer.*  
*Causes damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

*Do not breathe dust/fume/gas/mist/vapors/spray.*  
*Wear protective gloves.*  
*Wear eye protection / face protection.*  
*Wash thoroughly after handling.*  
*Do not eat, drink or smoke when using this product.*  
*Contaminated work clothing must not be allowed out of the workplace.*  
*Obtain special instructions before use.*  
*Do not handle until all safety precautions have been read and understood.*  
*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*Specific treatment (see on this label).*  
*Wash contaminated clothing before reuse.*  
*IF exposed or concerned: Get medical advice/attention.*  
*If skin irritation or rash occurs: Get medical advice/attention.*  
*If eye irritation persists: Get medical advice/attention.*  
*Get medical advice/attention if you feel unwell.*  
*IF ON SKIN: Wash with plenty of water.*  
*Take off contaminated clothing and wash it before reuse.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



*Health = 1*  
*Fire = 0*  
*Reactivity = 0*

· **HMIS-ratings (scale 0 - 4)**



*Health = 1*  
*Fire = 0*  
*Reactivity = 0*

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Hazardous Components:**

409-21-2	silicon carbide	25-50%
7440-50-8	copper	10-<25%
7440-02-0	nickel ⚠️ Carc. 2, H351; STOT RE 1, H372; ⚠️ Skin Sens. 1, H317	10-<25%
7429-90-5	aluminium powder (stabilised) ⚠️ Flam. Sol. 1, H228; Water-react. 2, H261	2.5-<10%
1344-28-1	aluminium oxide	2.5-<10%
7440-22-4	silver	2.5-<10%
13463-67-7	titanium dioxide ⚠️ Carc. 2, H351	2.5-<10%
108-95-2	phenol ⚠️ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠️ Muta. 2, H341; STOT RE 2, H373; ⚠️ Skin Corr. 1B, H314	1-≤2.5%

· **Non-hazardous Components:**

Resin	10-<25%
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### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **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**  
Coughing  
Breathing difficulty  
Fever
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **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:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

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**409-21-2 silicon carbide**

PEL	Long-term value: 15* 5** mg/m <sup>3</sup> fibrous dust: *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV	Long-term value: 10* 3** mg/m <sup>3</sup> fibrous dust: 0.1 f/cc; nonfibrous: *inh., **resp.

**7440-50-8 copper**

PEL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m <sup>3</sup> *dusts and mists; **fume; as Cu

**7440-02-0 nickel**

PEL	Long-term value: 1 mg/m <sup>3</sup>
REL	Long-term value: 0.015 mg/m <sup>3</sup>
TLV	Long-term value: 1.5* mg/m <sup>3</sup> elemental, *inhalable fraction

**1344-28-1 aluminium oxide**

PEL	Long-term value: 15*; 5** mg/m <sup>3</sup> *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m <sup>3</sup> as Al*Total dust**Respirable/pyro powd./welding f.
TLV	Long-term value: 1* mg/m <sup>3</sup> as Al; *as respirable fraction

**7440-22-4 silver**

PEL	Long-term value: 0.01 mg/m <sup>3</sup>
REL	Long-term value: 0.01 mg/m <sup>3</sup>
TLV	Long-term value: 0.1 mg/m <sup>3</sup> metal: dust and fume

**108-95-2 phenol**

PEL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin
REL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Ceiling limit value: 60* mg/m <sup>3</sup> , 15.6* ppm *15-min; Skin
TLV	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin; BEI

**· 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)
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· **Additional information:** The lists that were valid during the creation were used as basis.

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- **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.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Solid

**Color:** According to product specification

- **Odor:** Light

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

**Melting point/Melting range:** > 220 °C (> 428 °F)

**Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

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· <b>Ignition temperature:</b>	
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Specific gravity:</b>	> 1.0 (Water = 1)
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	1.3 %
<b>VOC content:</b>	1.3 %
	12.7 g/l / 0.11 lb/gl
· <b>Other information</b>	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** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**

### ATE (Acute Toxicity Estimates)

Oral	LD50	4342 mg/kg (rat)
Dermal	LD50	4875 mg/kg
Inhalative	LC50/4 h	112 mg/l

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**7440-02-0 nickel**

Dermal	LD50	5010 mg/kg (rat)
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**108-95-2 phenol**

Oral	LD50	317 mg/kg (rat)
Dermal	LD50	850 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:** Abrasive skin irritant
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7440-02-0	nickel	1
13463-67-7	titanium dioxide	2B
108-95-2	phenol	3

· **NTP (National Toxicology Program)**

7440-02-0	nickel	R
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 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:** Generally not hazardous for water
- **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.

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## 14 Transport information

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

## 15 Regulatory information

<b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>· Sara</b>	
<b>· Section 355 (extremely hazardous substances):</b>	
108-95-2	<i>phenol</i>
<b>· Section 313 (Specific toxic chemical listings):</b>	
7440-50-8	<i>copper</i>
7440-02-0	<i>nickel</i>
1344-28-1	<i>aluminium oxide</i>
7440-22-4	<i>silver</i>
108-95-2	<i>phenol</i>
<b>· TSCA (Toxic Substances Control Act):</b>	
409-21-2	<i>silicon carbide</i>
7440-50-8	<i>copper</i>
7440-02-0	<i>nickel</i>
1344-28-1	<i>aluminium oxide</i>
7440-22-4	<i>silver</i>
13463-67-7	<i>titanium dioxide</i>
108-95-2	<i>phenol</i>
<b>· Proposition 65</b>	
<b>· Chemicals known to cause cancer:</b>	
7440-02-0	<i>nickel</i>

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13463-67-7	titanium dioxide
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· **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.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7440-50-8	copper	D
7440-22-4	silver	D
108-95-2	phenol	D, I

· **TLV (Threshold Limit Value established by ACGIH)**

409-21-2	silicon carbide	A2
7440-02-0	nickel	A5
1344-28-1	aluminium oxide	A4
13463-67-7	titanium dioxide	A4
108-95-2	phenol	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

7440-02-0	nickel
13463-67-7	titanium dioxide

· **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

· **Date of preparation / last revision** 04/04/2016 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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*BEI: Biological Exposure Limit**Flam. Sol. 1: Flammable solids – Category 1**Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2**Acute Tox. 3: Acute toxicity – Category 3**Skin Corr. 1B: Skin corrosion/irritation – Category 1B**Skin Irrit. 2: Skin corrosion/irritation – Category 2**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. 2: Carcinogenicity – Category 2**Carc. 2: Carcinogenicity – Category 2**STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

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