

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

**\* 1 Identification**

- **Product name:** Diamond Slurry, Polycrystalline, 0.05 and 0.1 microns
- **Part number:** 90-22995-S - 90-23000-S
- **Application of the substance / the mixture** Polishing solution
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Allied High Tech Products Inc.  
16207 Carmenita Road  
USA-Cerritos, CA, 90703  
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**



GHS07

Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Flammable Liquids 4 H227 Combustible liquid.

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



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Fumd Silica, Crystalline Free  
ethylene glycol monobutyl ether  
mequinol
- **Hazard statements**  
Combustible liquid.  
Harmful if inhaled.

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May cause an allergic skin reaction.

**Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

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 INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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:**

112945-52-5	Fumd Silica, Crystalline Free ⚠ Acute Toxicity - Inhalation 3, H331	1-5%
150-76-5	mequinol ⚠ Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	0.1-<1%
111-76-2	ethylene glycol monobutyl ether ⚠ Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331; ⚠ Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Eye Irritation 2A, H319; Flammable Liquids 4, H227	≤1%

**Non-hazardous components:**

9038-95-3	polyalkylene glycol monobutyl ether	90-100%
9005-65-6	Lubricant	1-5%
7782-40-3	Diamond	≤1%

**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:**

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.**After swallowing:** If symptoms persist consult doctor.**Information for doctor:****Most important symptoms and effects, both acute and delayed**

Gastric or intestinal disorders

Breathing difficulty

Coughing

Allergic reactions

Dermatitis

**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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep away from ignition sources
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Dilute with plenty of water.
- **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 section 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**  
Protect from heat and direct sunlight.  
Ensure proper ventilation/exhaustion at workplaces.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
No special requirements.
- **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 additional data. See 7.
- **Control parameters**

Components with limit values that require monitoring at the workplace:	
<b>112945-52-5 Fumd Silica, Crystalline Free</b>	
TWA	Long-term value: 0.8 mg/m <sup>3</sup>
<b>150-76-5 mequinol</b>	
REL	Long-term value: 5 mg/m <sup>3</sup>
TLV	Long-term value: 5 mg/m <sup>3</sup>

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111-76-2 ethylene glycol monobutyl ether	
PEL	Long-term value: 240 mg/m <sup>3</sup> , 50 ppm Skin
REL	Long-term value: 24 mg/m <sup>3</sup> , 5 ppm Skin
TLV	Long-term value: 20 ppm BEI, A3
· <b>Ingredients with biological limit values:</b>	
111-76-2 ethylene glycol monobutyl ether	
BEI	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid (BAA) (with hydrolysis)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**



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**

Butyl rubber, BR

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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
Form:	Solution
Color:	Yellowish
· <b>Odor:</b>	Mild
· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
Melting point/Melting range:	-9.4 °C (15.1 °F)
Boiling point/Boiling range:	171.1 °C (340 °F)
· <b>Flash point:</b>	90 °C (194 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.

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· <b>Danger of explosion:</b>	Not determined.
· <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>	≥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>	0.2 %
<b>VOC content:</b>	0.19 %
<b>Solids content:</b>	97.6 %
· <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**
  - Alkaline earth metals
  - Keep away from oxidising agents and acidic substances.
  - Excessive heat
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
- **Additional information:** Hazardous decomposition products may form during combustion.

## 11 Toxicological information

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

· <b>LD/LC50 values that are relevant for classification:</b>		
<b>ATE (Acute Toxicity Estimate)</b>		
Dermal	LD50	215,750 mg/kg (rabbit)
Inhalative	LC50/4 h	>14.7 mg/l
<b>112945-52-5 Fumd Silica, Crystalline Free</b>		
Oral	LD50	>5,110 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>0.691 mg/l (rat)
<b>150-76-5 mequinol</b>		
Oral	LD50	1,600 mg/kg (rat)

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Dermal	LD50	5,010 mg/kg (rat)
<b>111-76-2 ethylene glycol monobutyl ether</b>		
Oral	LD50	1,200 mg/kg (ATE) 1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rabbit)
Inhalative	LC50/4 h	3 mg/l (ATE) 2.2 mg/l (rat)

- **Primary chemical irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>		
111-76-2	ethylene glycol monobutyl ether	3

· <b>NTP (National Toxicology Program)</b>		
None of the ingredients is listed.		

· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
None of the ingredients is listed.		

## 12 Ecological information

- **Toxicity**

· <b>Aquatic toxicity:</b>		
<b>111-76-2 ethylene glycol monobutyl ether</b>		
EC50 (48 h) (static)	1,550 mg/l (daphnia)	

- **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		not regulated
· DOT, ADN, IMDG, IATA		

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· 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

No further relevant information available.

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

111-76-2 ethylene glycol monobutyl ether

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· 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

To the best of our knowledge, the information contained herein is accurate. However, it does not describe a guarantee of product properties and does not establish a contractual legal relationship.

· Department issuing SDS: Technical Services

· Contact: Pablo Mendoza

· Last revision / supersedes version: 06/01/2024 / 3.0

· Supersedes date: 06/01/2022

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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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  
Acute Toxicity - Oral 4: Acute toxicity – Category 4  
Acute Toxicity - Inhalation 3: Acute toxicity – Category 3  
Skin Irritation 2: Skin corrosion/irritation – Category 2  
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A  
Sensitization - Skin 1: Skin sensitisation – Category 1

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