

## Safety Data Sheet acc. to OSHA HCS

Printing date 06/14/2018

Reviewed on 06/14/2018

### 1 Identification

· **Product name:** Aluminum Oxide Cut-Off & Wafering Blades, Resin Bond

· **Part number:**

80-10001 - 80-10025  
80-30000 - 80-30035  
80-40000 - 80-40040  
80-50000 - 80-50040

· **Application of the substance / the mixture** Abrasive blade

· **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**



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· **Additional information:** Classification may change depending on the exact product composition.

· **Label elements**

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

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- **Hazard statements**

*Causes skin irritation.*

*Causes serious eye irritation.*

- **Precautionary statements**

*Wash thoroughly after handling.*

*Wear protective gloves / eye protection / face protection.*

*If on skin: Wash with plenty of water.*

*Specific treatment (see on this label).*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*If skin irritation occurs: Get medical advice/attention.*

*Take off contaminated clothing and wash it before reuse.*

*If eye irritation persists: Get medical advice/attention.*

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	0
REACTIVITY	0

Health = 1

Fire = 0

Reactivity = 0

- **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:**

1344-28-1	aluminium oxide	50-100%
7789-75-5	calcium fluoride	2.5-10%
1309-37-1	diiron trioxide	2.5-10%
8002-74-2	Paraffin waxes and Hydrocarbon waxes	2.5-10%
14075-53-7	potassium tetrafluoroborate	≤2.5%
	☠ Acute Tox. 3, H301; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
1305-62-0	calcium dihydroxide	≤2.5%
	☠ Skin Corr. 1B, H314; Eye Dam. 1, H318	

- **Non-hazardous Components:**

	Polymeric Resin (cured)	2.5-10%
	Epoxy (cured)	2.5-10%
12068-85-8	Iron Disulphide	2.5-10%
1314-98-3	zinc sulphide	2.5-10%

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· **Additional information:** The exact percentage or concentration of the above ingredients is proprietary.

## 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** 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** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** 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** Not required.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

1344-28-1	aluminium oxide	15 mg/m <sup>3</sup>
7789-75-5	calcium fluoride	15 mg/m <sup>3</sup>
1309-37-1	diiron trioxide	15 mg/m <sup>3</sup>
12068-85-8	Iron Disulphide	30 mg/m <sup>3</sup>
1314-98-3	zinc sulphide	8.9 mg/m <sup>3</sup>
14075-53-7	potassium tetrafluoroborate	12 mg/m <sup>3</sup>
1305-62-0	calcium dihydroxide	15 mg/m <sup>3</sup>

· **PAC-2:**

1344-28-1	aluminium oxide	170 mg/m <sup>3</sup>
7789-75-5	calcium fluoride	170 mg/m <sup>3</sup>
1309-37-1	diiron trioxide	360 mg/m <sup>3</sup>
12068-85-8	Iron Disulphide	330 mg/m <sup>3</sup>
1314-98-3	zinc sulphide	99 mg/m <sup>3</sup>

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14075-53-7	potassium tetrafluoroborate	140 mg/m <sup>3</sup>
1305-62-0	calcium dihydroxide	240 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
1344-28-1	aluminium oxide	990 mg/m <sup>3</sup>
7789-75-5	calcium fluoride	1,000 mg/m <sup>3</sup>
1309-37-1	diiron trioxide	2,200 mg/m <sup>3</sup>
12068-85-8	Iron Disulphide	2,000 mg/m <sup>3</sup>
1314-98-3	zinc sulphide	590 mg/m <sup>3</sup>
14075-53-7	potassium tetrafluoroborate	830 mg/m <sup>3</sup>
1305-62-0	calcium dihydroxide	1,500 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Any deposit of dust which cannot be avoided must be regularly removed.
- **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 dry place.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:**

### 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

### 7789-75-5 calcium fluoride

PEL	Long-term value: 2.5 mg/m <sup>3</sup> as F
REL	Long-term value: 2.5 mg/m <sup>3</sup> as F
TLV	Long-term value: 2.5 mg/m <sup>3</sup> as F, BEI

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**1309-37-1 diiron trioxide**

PEL	Long-term value: 10* mg/m <sup>3</sup> *Fume
REL	Long-term value: 5 mg/m <sup>3</sup> Dust & fume, as Fe
TLV	Long-term value: 5* mg/m <sup>3</sup> *as respirable fraction

**8002-74-2 Paraffin waxes and Hydrocarbon waxes**

REL	Long-term value: 2 mg/m <sup>3</sup>
TLV	Long-term value: 2 mg/m <sup>3</sup>

**14075-53-7 potassium tetrafluoroborate**

PEL	Long-term value: 2.5 mg/m <sup>3</sup> as F
REL	Long-term value: 2.5 mg/m <sup>3</sup> as F
TLV	Long-term value: 2.5 mg/m <sup>3</sup> as F, BEI

**1305-62-0 calcium dihydroxide**

PEL	Long-term value: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL	Long-term value: 5 mg/m <sup>3</sup>
TLV	Long-term value: 5 mg/m <sup>3</sup>

**· Ingredients with biological limit values:****7789-75-5 calcium fluoride**

BEI	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific)
	3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

**14075-53-7 potassium tetrafluoroborate**

BEI	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific)
	3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

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*Immediately remove all soiled and contaminated clothing.*

*Wash hands before breaks and at the end of work.*

*Avoid contact with the eyes and skin.*

· **Breathing equipment:** *Not required.*

· **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

· **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:** Odorless

· **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.

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· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with Water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Solvent content:</b>	
<b>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gl
<b>Solids content:</b>	100.0 %
· <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** Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Keep away from oxidising agents and acidic substances.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
Aluminum oxides  
Carbon monoxide and carbon dioxide
- **Additional information:** Hazardous decomposition products may form under fire.

## 11 Toxicological information

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

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

**ATE (Acute Toxicity Estimate)**

Oral	LD50	5,941 mg/kg
Inhalative	LC50/4 h	>10.3 mg/l (rat)

**1344-28-1 aluminium oxide**

Oral	LD50	5,010 mg/kg (rat)
Inhalative	LC50/4 h	>6 mg/l (rat)

**7789-75-5 calcium fluoride**

Oral	LD50	4,250 mg/kg (rat)
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**1309-37-1 diiron trioxide**

Oral	LD50	>5,000 mg/kg (rat)
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### 14075-53-7 potassium tetrafluoroborate

Oral	LD50	100 mg/kg (ATE)
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### 1305-62-0 calcium dihydroxide

Oral	LD50	7,340 mg/kg (rat)
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- **Primary chemical irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
Abrasive skin irritant  
Abrasive eye irritant
- **Carcinogenic categories**

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

7789-75-5	calcium fluoride	3
1309-37-1	diiron trioxide	3
14075-53-7	potassium tetrafluoroborate	3

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

#### · 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:**  
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.

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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, ADN, IMDG, IATA</b>	
<b>· 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>	<i>No</i>
<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>	
<i>None of the ingredients is listed.</i>	
<b>· Section 313 (Specific toxic chemical listings):</b>	
1344-28-1	<i>aluminium oxide</i>
1314-98-3	<i>zinc sulphide</i>
<b>· TSCA (Toxic Substances Control Act):</b>	
1344-28-1	<i>aluminium oxide</i>
7789-75-5	<i>calcium fluoride</i>
1309-37-1	<i>diiron trioxide</i>
12068-85-8	<i>Iron Disulphide</i>
1314-98-3	<i>zinc sulphide</i>
8002-74-2	<i>Paraffin waxes and Hydrocarbon waxes</i>
14075-53-7	<i>potassium tetrafluoroborate</i>
1305-62-0	<i>calcium dihydroxide</i>
<b>· TSCA new (21st Century Act) (Substances not listed)</b>	
	<i>Polymeric Resin (cured)</i>
	<i>Epoxy (cured)</i>
12068-85-8	<i>Iron Disulphide</i>
<b>· Proposition 65</b>	
<b>· Chemicals known to cause cancer:</b>	
<i>None of the ingredients is listed.</i>	

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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)**

1314-98-3	zinc sulphide	D, I, II
14075-53-7	potassium tetrafluoroborate	I (oral)

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

1344-28-1	aluminium oxide	A4
7789-75-5	calcium fluoride	A4
1309-37-1	diiron trioxide	A4
14075-53-7	potassium tetrafluoroborate	A4

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

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

· **Date of preparation / last revision** 06/14/2018 / -

· **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

BEI: Biological Exposure Limit

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