Safety Data Sheet
acc. to OSHA HCS

Printing date 07/02/2024 *Version 4.0* *Last revision 06/01/2024*

* 1 Identification

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

· **Part number:**
80-10010 - 80-10030
80-11180 - 80-11220
80-30000 - 80-30030
80-40000 - 80-40035
80-50000 - 80-50035

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

· **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**


GHS08 Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer. Route of exposure: Inhalation.


GHS07

Skin Irritation 2 H315 Causes skin irritation.
Eye Irritation 2A H319 Causes serious eye irritation.

Aquatic Acute 3 H402 Harmful to aquatic life.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Additional information:**
All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk.

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

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 1)

· **Hazard pictograms**

GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**
isoprene (stabilized)
titanium dioxide

· **Hazard statements**
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer. Route of exposure: Inhalation.
Harmful to aquatic life with long lasting effects.

· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Avoid release to the environment.
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 occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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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:**		
1344-28-1	aluminium oxide	0-90%
409-21-2	silicon carbide	0-90%
60304-36-1	Potassium aluminum fluoride Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H335; Eye Irritation 2B, H320	<20%
1332-58-7	Kaolin	<20%
7778-18-9	calcium sulphate, natural	<20%
9006-04-6	Natural rubber latex	<20%
1309-37-1	diiron trioxide	<15%
7704-34-9	sulfur Skin Irritation 2, H315	<15%
15096-52-3	cryolite Aquatic Chronic 2, H411; Acute Toxicity - Inhalation 4, H332	<15%
1317-65-3	Limestone Acute Toxicity - Inhalation 4, H332	<5%
14075-53-7	potassium tetrafluoroborate Acute Toxicity - Oral 3, H301; Skin Irritation 2, H315; Eye Irritation 2A, H319	<5%

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 2)

1305-78-8	calcium oxide Eye Damage 1, H318	<4%
78-79-5	isoprene (stabilized) Flammable Liquids 1, H224; Germ Cell Mutagenicity 2, H341; Carcinogenicity 2, H351; Aquatic Chronic 3, H412	<3%
557-04-0	magnesium stearate	<3%
1314-13-2	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<1%
13463-67-7	titanium dioxide Carcinogenicity 2, H351	<1%

· **Non-hazardous components:**		
1309-38-2	Iron Oxide	<12%
12068-85-8	Iron Disulphide	<12%
	Resin	<15%

· **Additional information:**
Product may contain many or all of the above ingredients.
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:** 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
Eye irritation
Coughing
Dermatitis
Eye irritation
Dermatitis
· **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.
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
· **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to section 13.
· **Reference to other sections**
See Section 7 for information on safe handling.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Product name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

(Contd. of page 3)

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Any deposit of dust which cannot be avoided must be regularly removed.
Open and handle receptacle with care.
· **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:** 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 additional data. See 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.

1344-28-1 aluminium oxide	
PEL	Long-term value: 15*; 5** mg/m³ *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV	Long-term value: 1* mg/m³ as Al; *as respirable fraction, A4
409-21-2 silicon carbide	
PEL	Long-term value: 15* 5** mg/m³ fibrous dust: *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction
TLV	Long-term value: 10* 3** mg/m³ fibrous dust:0.1 f/cc A2, nonfibrous:*inh.,**resp.
1332-58-7 Kaolin	
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction
TLV	Long-term value: 2* mg/m³ E; respirable particulate matter, A4
7778-18-9 calcium sulphate, natural	
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 4)

TLV	Long-term value: 10* mg/m³ *as inhalable fraction
9006-04-6 Natural rubber latex	
TLV	Long-term value: 0.0001* mg/m³ Skin; DSEN, RSEN;* inh. particulate matter
1309-37-1 diiron trioxide	
PEL	Long-term value: 10* mg/m³ *Fume
REL	Long-term value: 5 mg/m³ Dust & fume, as Fe
TLV	Long-term value: 5* mg/m³ *Respirable particulate matter, A4
15096-52-3 cryolite	
PEL	Long-term value: 2.5 mg/m³ as F
REL	Long-term value: 2.5 mg/m³ as F
1317-65-3 Limestone	
PEL	Long-term value: 15 mg/m³
14075-53-7 potassium tetrafluoroborate	
PEL	Long-term value: 2.5 mg/m³ as F
REL	Long-term value: 2.5 mg/m³ as F
TLV	Long-term value: 2.5 mg/m³ as F, A4; BEI
1305-78-8 calcium oxide	
PEL	Long-term value: 5 mg/m³
REL	Long-term value: 2 mg/m³
TLV	Long-term value: 2 mg/m³
78-79-5 isoprene (stabilized)	
WEEL	Long-term value: 2 ppm
557-04-0 magnesium stearate	
TLV	Long-term value: 10* 3** mg/m³ A4; Fraction: *inhalable **respirable
1314-13-2 zinc oxide	
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction and fume
REL	Short-term value: 10** mg/m³ Long-term value: 5 mg/m³ Ceiling limit value: 15* mg/m³ *dust only **fume
TLV	Short-term value: 10* mg/m³ Long-term value: 2* mg/m³ *respirable particulate matter
13463-67-7 titanium dioxide	
PEL	Long-term value: 15* mg/m³ *total dust

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

REL	See Pocket Guide App. A
TLV	Long-term value: 0.2* 2.5** mg/m³ resp. fraction, *nanoscale,**finescale, A3

· **Ingredients with biological limit values:**

15096-52-3 cryolite

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)

· **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:**
Not required.
Use suitable respiratory protective device in case of insufficient ventilation.
· **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

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Solid
Color:	According to product specification
· **Odor:**	Characteristic
· **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.
· **Ignition temperature:**	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.
· **Specific gravity:**	1.8 - 2.5 (Water = 1)
· **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:**	
VOC content:	0.00 %
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** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
· **Additional information:** Hazardous decomposition products may form during combustion.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 07/02/2024 *Version 4.0* *Last revision 06/01/2024*

Product name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

(Contd. of page 7)

11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
Oral	LD50	≥7,194 mg/kg
Inhalative	LC50/4 h	30.8-216 mg/l

1344-28-1 aluminium oxide		
Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>6 mg/l (rat)
409-21-2 silicon carbide		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
1309-37-1 diiron trioxide		
Oral	LD50	>5,000 mg/kg (rat)
15096-52-3 cryolite		
Inhalative	LC50/4 h	1.5 mg/l (ATE)
1317-65-3 Limestone		
Oral	LD50	6,450 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	3 mg/l (rat)
14075-53-7 potassium tetrafluoroborate		
Oral	LD50	100 mg/kg (ATE)
1314-13-2 zinc oxide		
Oral	LD50	>5,000 mg/kg (rat)
13463-67-7 titanium dioxide		
Oral	LD50	>20,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.82 mg/l (rat)

· **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)**		
409-21-2	silicon carbide	2A
1309-37-1	diiron trioxide	3
14075-53-7	potassium tetrafluoroborate	3
78-79-5	isoprene (stabilized)	2B
13463-67-7	titanium dioxide	2B

· **NTP (National Toxicology Program)**		
78-79-5	isoprene (stabilized)	R

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 8)

· **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.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Harmful to aquatic organisms
· **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**
No further relevant information available.

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 9)

· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**	
1344-28-1	aluminium oxide
78-79-5	isoprene (stabilized)
1314-13-2	zinc oxide

· **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:**	
78-79-5	isoprene (stabilized)
13463-67-7	titanium dioxide

· **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
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 1: Flammable liquids – Category 1
Acute Toxicity - Oral 3: Acute toxicity – Category 3
Acute Toxicity - Inhalation 4: Acute toxicity – Category 4
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
Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B
Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 10)

Carcinogenicity 2: Carcinogenicity – Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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