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Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- · Trade name: Abrasive Products
- · Article number: AO, Regular, MX, MXD
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture: Manufactured Article.
- · Uses advised against: Contact manufacturer.
- 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:
 Micro-Surface Finishing Products, Inc.
 1217 West 3rd Street
 Wilton, IA 52778
 563-732-3240
 sales@micro-surface.com
- · 1.4 Emergency telephone number: 563-732-3240

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

The product is not classified as hazardous according to the CLP regulation.

· Additional information:

Not hazardous as delivered. Long term inhalation of product dusts formed during use is harmful. Avoid breathing dust.

To avoid risks to human health and the environment, comply with the instructions for use.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

This product does not have a classification according to the CLP regulation.

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

- · Hazard pictograms Not Regulated
- · Signal word Not Regulated
- Hazard-determining components of labelling: None.
- · Hazard statements Not Regulated
- · Precautionary statements Not Regulated.
- · Additional information:

Safety data sheet available on request.

NFPA ratings (scale 0 - 4)



Health = 0 Fire = 0 Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

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O Health = 0 Fire = 0 REACTIVITY 0 Reactivity = 0

· 2.3 Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

Results of PBT and vPvB assessment

· **PBT**: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Components:		
CAS: 409-21-2 EINECS: 206-991-8 Reg.nr.: 01-2119402892-42-XXXX	silicon carbide substance with a Community workplace exposure limit	Variable%
CAS: 1344-28-1 EINECS: 215-691-6 Reg.nr.: 01-2119529248-35-XXXX	aluminium oxide substance with a Community workplace exposure limit	Variable%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide substance with a Community workplace exposure limit	Variable%
CAS: 1309-37-1 EINECS: 215-168-2 Reg.nr.: 01-2119457614-35-XXXX	diiron trioxide / iron (III) oxide substance with a Community workplace exposure limit	Variable%

Additional information:

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret. Variable percentages used per OSHA §1910.1200 (g)(4).

Products contain no Hazardous Air Pollutants (HAPs) according to Section 112(b)1 of the United States Environmental Protection Agency Clean Air Act.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: Avoid breathing dust.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

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· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

^{4.2} Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation
- **6.2 Environmental precautions** No special measures required.
- · 6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid breathing dust.

Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.

Information about fire - and explosion protection: No special measures required.

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- 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Protect from humidity and water.
- Information about storage in one common storage facility: No further relevant information available.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

6.1 Control	8.1 Control parameters				
· Ingredients v	· Ingredients with limit values that require monitoring at the workplace:				
409-21-2 silic	409-21-2 silicon carbide				
PEL (USA)	Long-term value: 15* 5** mg/m³ fibrous dust: *total dust **respirable fraction				
REL (USA)	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction				
TLV (USA)	Long-term value: 10* 3** mg/m³ fibrous dust:0,1 f/cc; nonfibrous:*inh.,**resp.				
EL (Canada)	Long-term value: 10* 3** mg/m³ *inhalable;**respirable				
EV (Canada)	/ (Canada) Long-term value: 10* 3** mg/m³, 0,1f/cc*** ppm nonfibrous: *inh.,**resp.; ***fibrous, resp.				
1344-28-1 alu	1344-28-1 aluminium oxide				
PEL (USA)	Long-term value: 15*; 15** mg/m³ *Total dust; ** Respirable fraction				
REL (USA)	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.				
TLV (USA)	Long-term value: 1* mg/m³ as Al; *as respirable fraction				
EL (Canada)	a) Long-term value: 1,0 mg/m³ respirable, as Al				
EV (Canada)	Canada) Long-term value: 10 mg/m³ total dust				
13463-67-7 ti	tanium dioxide				
PEL (USA)	Long-term value: 15* mg/m³ *total dust				
REL (USA)	See Pocket Guide App. A				
TLV (USA)	Long-term value: 10 mg/m³ withdrawn from NIC				
EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction; IARC 2B				
EV (Canada)	Long-term value: 10 mg/m³ total dust				
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1309-37-1 diiron trioxide / iron (III) oxide		
PEL (USA)	Long-term value: 10* 15** 5*** mg/m³ *Fume; Rouge: **Total dust, ***respirable	
REL (USA)	Long-term value: 5 mg/m³ Dust & fume, as Fe	
TLV (USA)	Long-term value: 5* mg/m³ *as respirable fraction	
EL (Canada)	a) Short-term value: 10** mg/m³ Long-term value: 5* 10*** 3**** mg/m³ *dust & fume**fume; Rouge: ***total dust****resp.	
,	Long-term value: 5* 10** mg/m³ *respirable, including Rouge;**total dust	

- · **DNELs:** No further relevant information available.
- · PNECs: No further relevant information available.
- 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

· Respiratory protection:

NIOSH or EU approved dust respirator is highly recommended when ventilation is poor.

Use respiratory protection when grinding or cutting material.

· Protection of hands:

Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388.

· Eye protection:



Safety glasses

- · Body protection: Light weight protective clothing
- · Limitation and supervision of exposure into the environment: No special requirements.
- · Risk management measures: No special requirements.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

· Appearance

Form: Solid material

Colour: According to product specification

· Odour: Rubber/Plastic
· Odour threshold: Not determined.

pH-value: Not applicable.Melting point/freezing point: Not determined.

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	(Cont'd. from p	oage
· Initial boiling point and boiling range:	: Not determined.	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not determined.	
· Auto/Self-ignition temperature:	Not determined.	
· Decomposition temperature:	Not determined.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
· Density:		
Relative density:	Not determined.	
Vapour density:	Not applicable.	
Evaporation rate:	Not applicable.	
· Solubility in / Miscibility with		
water:	Soluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with strong acids and alkali.

Reacts with strong oxidising agents.

- 10.4 Conditions to avoid Prevent formation of dust.
- · 10.5 Incompatible materials No further relevant information available.
- · 10.6 Hazardous decomposition products

Under fire conditions only:

Toxic metal oxide smoke

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SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification: None.
- · Primary irritant effect
- · Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- · Subacute to chronic toxicity: No further relevant information available.
- Carcinogenic categories
- IARC (International Agency for Research on Cancer):

13463-67-7 titanium dioxide

2B

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable routes of exposure:

Eye contact.

Skin contact.

- Repeated dose toxicity:
- Repeated or long-term inhalation of product dusts may cause pulmonary disease.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) See Section 15.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water
- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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• 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- · Recommendation

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information		
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	Not Regulated	
· 14.2 UN proper shipping name · DOT, ADR, IMDG, IATA	Not Regulated	
· 14.3 Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not Regulated	
· 14.4 Packing group · DOT, ADR, IMDG, IATA	Not Regulated	
· 14.5 Environmental hazards: · Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
 14.7 Transport in bulk according to Anr of Marpol and the IBC Code 	nex II Not applicable.	

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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- ·SARA
- Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

1344-28-1 aluminium oxide

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

Reference to titanium dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.

13463-67-7 titanium dioxide

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- Carcinogenic Categories
- · EPA (Environmental Protection Agency)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

Reference to chemical component(s) listed below are based on unbound respirable particles and are not generally applicable to product as supplied.

13463-67-7 titanium dioxide

2B

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

13463-67-7 titanium dioxide

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

- · National regulations:
- · Water hazard class: Generally not hazardous for water.
- · Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

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· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Abbreviations and acronyms:

ADR: 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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