

## Safety Data Sheet acc. to OSHA HCS

Printing date 12/01/2015

Version number 1

Reviewed on 12/01/2015

### 1 Identification

· **Product identifier**

· **Trade name:** **Reinforced Resinoid Bonded Abrasive Wheels**

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Osborn  
2350 Salisbury Road  
Richmond  
Indiana 47374  
U.S.A.

· **Information department:**

Phone: +1 765-965-5333  
marketsupport@osborn.com; Subject: SDS info Request

· **Emergency telephone number:** CHEMTREC: +1 800-424-9300 (24h).

### 2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS08 Health hazard

STOT RE 1 H372 Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2A H319 Causes serious eye irritation.

Lact. H362 May cause harm to breast-fed children.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Danger

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

Aluminum potassium fluoride  
aluminium trisodium hexafluoride

· **Hazard statements**

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H362 May cause harm to breast-fed children.

H372 Causes damage to the respiratory system through prolonged or repeated exposure.  
Route of exposure: Inhalation.

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- **Precautionary statements**

P202	Do not handle until all safety precautions have been read and understood.
P263	Avoid contact during pregnancy/while nursing.
P260	Do not breathe dust.
P280	Wear eye protection / face protection.
P271	Use only outdoors or in a well-ventilated area.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

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



Health = 3  
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:**

Article.

Polymer product

Mixture of the substances listed below including additives not requiring identification.

- **Dangerous components:**

CAS: 409-21-2 RTECS: VW 0450000	silicon carbide	0 - 85%
CAS: 1344-28-1 RTECS: BD 1200000	aluminium oxide	0 - 80%
CAS: 1314-23-4 RTECS: ZH 8800000	zirconium dioxide	0 - 40%
CAS: 15096-52-3 RTECS: WA 9625000	aluminium trisodium hexafluoride	0 - 15%
CAS: 60304-36-1	Aluminum potassium fluoride	0 - 15%
CAS: 1309-36-0	Pyrite (FeS <sub>2</sub> )	0 - 15%
CAS: 7727-43-7 RTECS: CR 0600000	barium sulphate, natural	0 - 5%

### 4 First-aid measures

- **Description of first aid measures**

- **General information:** No special measures required.

- **After inhalation:**

Remove from further exposure.

Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**  
Generally the product does not irritate the skin.  
Wash with water and soap.
- **After eye contact:**  
Rinse opened eye for several minutes under running water.  
Do not rub eyes dry, the mechanical stress can cause additional cornea damages.  
In case of permanent aches and pains please go and see the doctor.
- **After swallowing:**  
Swallowing is not considered to be a possible way of exposure.  
Rinse out mouth.  
Immediately call a 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:**  
The product itself does not burn.  
Use fire fighting measures that suit the environment.  
Foam, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None known.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
Do not inhale smoke and combustion products.
- **Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
No special measures required.  
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.

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Provide suction extractors if dust is formed.  
Avoid inhalation of dusts.  
Any deposit of dust which cannot be avoided must be regularly removed.
  - **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Store in dry conditions.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    - PEL: Permissible Exposure Limit
    - REL: Recommended Exposure Limit
    - TLV: Threshold Limit Value

#### 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.

#### 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

#### 1314-23-4 zirconium dioxide

PEL	Long-term value: 5 mg/m <sup>3</sup> as Zr
REL	Short-term value: 10 mg/m <sup>3</sup> Long-term value: 5 mg/m <sup>3</sup> as Zr
TLV	Short-term value: 10 mg/m <sup>3</sup> Long-term value: 5 mg/m <sup>3</sup> as Zr

#### 15096-52-3 aluminium trisodium hexafluoride

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

#### 1309-36-0 Pyrite (FeS<sub>2</sub>)

REL	Long-term value: 1 mg/m <sup>3</sup> as Fe
TLV	Long-term value: 1 mg/m <sup>3</sup> as Fe

#### 7727-43-7 barium sulphate, natural

PEL	Long-term value: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
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REL Long-term value: 10\* 5\*\* mg/m<sup>3</sup>  
\*total dust \*\*respirable fraction

TLV Long-term value: 5\* mg/m<sup>3</sup>  
\*inhalable fraction; E

· **Ingredients with biological limit values:**

**15096-52-3 aluminium trisodium hexafluoride**

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:**

Do not eat or drink while working.  
Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Approved dust respirators must be used for dusty conditions or if dust levels exceed established standards.

· **Protection of hands:**

Protective gloves are recommended for contact with abrasive dust.  
Wear gloves for the protection against mechanical hazards according to EN 388.

· **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.

· **Penetration time of glove material**

With solid dry substances permeation is not to be expected. Therefore the breakthrough-time for this protective glove has not been measured.

· **Eye protection:** Wear safety goggles/face shield.

· **Body protection:**

Use ear protection.  
Protective work clothing

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

· **Form:** Solid in various forms  
· **Color:** Different according to coloring  
· **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.

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- |   |   |
|---|---|
| <b>· Flammability (solid, gaseous):</b>   | Not determined.                               |
| <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>· Vapor pressure:</b>                  | Not applicable.                               |
| <b>· Density:</b>                         | Not determined.                               |
| <b>· Evaporation rate</b>                 | Not applicable.                               |
| <b>· Solubility in / Miscibility with</b> |   |
| <b>· Water:</b>                           | Insoluble.                                    |
| <b>· Solvent content:</b>                 |   |
| <b>· Organic solvents:</b>                | 0,0 %   |
| <b>· Other information</b>                | No further relevant information available.    |

### 10 Stability and reactivity

- **Reactivity** The product is stable and does not alter during use and storage.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.  
Thermal decomposition > 250 °C.
- **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:** Danger of toxic pyrolysis products.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**  
The product does not show toxicological effects after inhalation, eye- or skin contact or ingestion.

#### 409-21-2 silicon carbide

Oral	LDL0	2000 mg/kg (rat) (EU B.1)
Dermal	LD0	2000 mg/kg (rat) (EU B.3)

#### 1344-28-1 aluminium oxide

Oral	LD50	> 15900 mg/kg (rat) (OECD 401)
Inhalative	LC50	7.6 mg/l/1h (rat) (OECD 403)

#### 15096-52-3 aluminium trisodium hexafluoride

Oral	LD50	> 5000 mg/kg (rat) (OECD 401)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50	4.47 mg/l/4h (rat)

- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** Mechanical irritation by solid particles

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- **Additional toxicological information:**

- **Carcinogenic categories**

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

1333-86-4 Carbon black

2B

- **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:** The product is inert and insoluble in water. Nonhazardous for water organisms.

- **Persistence and degradability**

Based on previous experience, this product is inert and non-degradable.

- **Other information:** There are no data available about the preparation.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** Does not accumulate in organisms

- **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:** Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings:**

- **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Non contaminated packagings can be used for recycling.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

### 14 Transport information

- **UN-Number**

- **DOT, ADR, ADN, IMDG, IATA**

Void

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA**

Void

- **Transport hazard class(es)**

- **DOT**

- **Class**

Void

No hazardous good

- **ADR, ADN, IMDG**

- **Class**

Void

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· <b>IATA</b>	
· <b>Class</b>	Void Not Restricted
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.
· <b>UN "Model Regulation":</b>	Void

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

1344-28-1 aluminium oxide

7727-43-7 barium sulphate, natural

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

1333-86-4 Carbon black

- **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.

- **Carcinogeny categories**

- **EPA (Environmental Protection Agency)**

7727-43-7 barium sulphate, natural

D, CBD(inh), NL(oral)

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

409-21-2 silicon carbide

A2

1344-28-1 aluminium oxide

A4

1314-23-4 zirconium dioxide

A4

1333-86-4 Carbon black

A4

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

1333-86-4 Carbon black

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- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

1344-28-1	aluminium oxide
15096-52-3	aluminium trisodium hexafluoride

- **GHS label elements**

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

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

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

Aluminum potassium fluoride  
aluminium trisodium hexafluoride

- **Hazard statements**

H332 Harmful if inhaled.  
H319 Causes serious eye irritation.  
H362 May cause harm to breast-fed children.  
H372 Causes damage to the respiratory system through prolonged or repeated exposure.  
Route of exposure: Inhalation.

- **Precautionary statements**

P202	Do not handle until all safety precautions have been read and understood.
P263	Avoid contact during pregnancy/while nursing.
P260	Do not breathe dust.
P280	Wear eye protection / face protection.
P271	Use only outdoors or in a well-ventilated area.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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:**

This Material Safety Data Sheet has been drawn up in cooperation with:  
DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,  
phone: (+49) 511 42079 - 0, reach@dekra.com.  
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- **Date of preparation / last revision** 12/01/2015 / -

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**· 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)  
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. 4: Acute toxicity, Hazard Category 4  
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
Lact.: Reproductive toxicity, Additional category, Effects on or via lactation  
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

US