

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: January 16, 2020

1 Identification

- **Product identifier**
- **Trade name:** Green Diamond Abrasives: 8x16, 1636, 1650, 2050, 30x50, 3060, 205CS, GDX45 or any blend of the above products
- **Product code:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Abrasives
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Green Diamond Performance Materials
PO Box D
Riddle, OR 97469 USA
Tel (541) 874-3111
- **Emergency telephone number:** (541) 874-3111

2 Hazard(s) identification

- **Classification of the substance or mixture**
STOT RE 1 H372 Causes damage to the lung and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation.

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

GHS08
- **Signal word:** Danger
- **Hazard statements:**
H372 Causes damage to the lung and the respiratory tract through prolonged or repeated exposure.
Route of exposure: Inhalation.
- **Precautionary statements:**
P260 Do not breathe dust.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Components:**

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| | | |
|-------------|---|--------|
| 112926-00-8 | Silicon oxide, amorphous ⚠ STOT RE 1, H372 | 40-60% |
| 1309-48-4 | Magnesium oxide | 20-40% |
| 1309-37-1 | Diiron trioxide / iron (III) oxide | 10-20% |
| 1344-28-1 | Aluminum oxide ⚠ STOT RE 2, H373 | 1-5% |
| 1305-78-8 | Calcium oxide ⚠ Eye Dam. 1, H318 ⚠ Skin Irrit. 2, H315; STOT SE 3, H335 | <1% |
| 1308-38-9 | Chromium (III) oxide | <1% |
| 11099-02-8 | Nickel oxide ⚠ Carc. 1A, H350; STOT RE 1, H372 ⚠ Skin Sens. 1, H317 | <0.1% |

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
For the wording of the listed Hazard Statements, refer to section 16.

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.

Provide oxygen treatment if affected person has difficulty breathing.

After skin contact:

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

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; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Coughing

Breathing difficulty

Mechanical irritation to eyes and skin.

Gastric or intestinal disorders when ingested.

Danger:

Danger of impaired breathing.

Causes damage to the lung and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation.

Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No relevant information available.
- **Special hazards arising from the substance or mixture** No relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation.
- **Environmental precautions**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Damp down dust with water spray.
- **Methods and material for containment and cleaning up**
Pick up mechanically.
Sweep up and place into an appropriate container.
Send for recovery or disposal in suitable receptacles.
- **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:** Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** Containers should be tightly sealed.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

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Components with limit values that require monitoring at the workplace:

112926-00-8 Silicon oxide, amorphous

| | |
|---------------|---|
| PEL (USA) | 20mppcf or 80mg/m ³ /%SiO ₂ |
| REL (USA) | Long-term value: 6 mg/m ³ See Pocket Guide App. C |
| TLV (USA) | TLV withdrawn |
| EL (Canada) | Long-term value: 4* 1.5** mg/m ³ Precipitated and gel;*total;**respirable |
| EV (Canada) | Long-term value: 10 mg/m ³ |
| LMPE (Mexico) | Long-term value: 10 mg/m ³ |

1309-48-4 Magnesium oxide

| | |
|---------------|--|
| PEL (USA) | Long-term value: 15* mg/m ³ fume; *total particulate |
| TLV (USA) | Long-term value: 10* mg/m ³ *as inhalable fraction |
| EL (Canada) | Short-term value: 10** mg/m ³ Long-term value: 10* 3** mg/m ³ *inhalable fume;**respirable dust and fume |
| EV (Canada) | Long-term value: 10 mg/m ³ inhalable |
| LMPE (Mexico) | Long-term value: 10* mg/m ³ A4, *fracción respirable |

1309-37-1 Diiron trioxide / iron (III) oxide

| | |
|---------------|--|
| PEL (USA) | Long-term value: 10* mg/m ³ *Fume |
| REL (USA) | Long-term value: 5 mg/m ³ Dust & fume, as Fe |
| TLV (USA) | Long-term value: 5* mg/m ³ *as respirable fraction |
| EL (Canada) | Short-term value: 10** mg/m ³ Long-term value: 5* 10*** 3**** mg/m ³ *dust & fume**fume; Rouge: ***total dust****resp. |
| EV (Canada) | Long-term value: 5* 10** mg/m ³ *respirable, including Rouge;**total dust |
| LMPE (Mexico) | Long-term value: 5* mg/m ³ A4, *fracción respirable |

1344-28-1 Aluminum oxide

| | |
|-------------|--|
| PEL (USA) | Long-term value: 15*; 5** mg/m ³ *Total dust; ** Respirable fraction |
| REL (USA) | Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f. |
| TLV (USA) | Long-term value: 1* mg/m ³ as Al; *as respirable fraction |
| EL (Canada) | Long-term value: 1.0 mg/m ³ |

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| | |
|---------------------------------------|--|
| EV (Canada) | respirable, as Al Long-term value: 10 mg/m ³ total dust |
| LMPE (Mexico) | Long-term value: 1* mg/m ³ A4, *fracción respirable |
| 1305-78-8 Calcium oxide | |
| PEL (USA) | Long-term value: 5 mg/m ³ |
| REL (USA) | Long-term value: 2 mg/m ³ |
| TLV (USA) | Long-term value: 2 mg/m ³ |
| EL (Canada) | Long-term value: 2 mg/m ³ |
| EV (Canada) | Long-term value: 2 mg/m ³ |
| LMPE (Mexico) | Long-term value: 2 mg/m ³ |
| 1308-38-9 Chromium (III) oxide | |
| PEL (USA) | Long-term value: 0.5 mg/m ³ as Cr |
| REL (USA) | Long-term value: 0.5 mg/m ³ as Cr; See Pocket Guide App. C |
| TLV (USA) | Long-term value: 0.003 mg/m ³ as Cr(III);inhalable; soluble comp.: DSEN;RSEN |
| EL (Canada) | Long-term value: 0.5 mg/m ³ as Cr; S(D); water soluble only: S(R) |
| LMPE (Mexico) | Long-term value: 0.5 mg/m ³ A4 |
| 11099-02-8 Nickel oxide | |
| PEL (USA) | Long-term value: 1 mg/m ³ as Ni |
| REL (USA) | Long-term value: 0.015 mg/m ³ as Ni; See Pocket Guide App. A |
| TLV (USA) | Long-term value: 0.2 mg/m ³ as Ni; inhalable fraction |
| EL (Canada) | Long-term value: 0.05 mg/m ³ as Ni; ACGIH A1, IARC 1 |
| EV (Canada) | Long-term value: 0.2 mg/m ³ Inhalable fraction, as Ni |
| LMPE (Mexico) | Long-term value: 0.2 mg/m ³ Fracción inhalable; A1; como Ni |

· **Exposure controls**

· **General protective and hygienic measures:**

- The usual precautionary measures for handling chemicals should be followed.
- 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.

· **Engineering controls:** Provide adequate ventilation.

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- **Breathing equipment:** For operations generating dust: Wear FFP3 dust mask.
- **Protection of hands:**
Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.
- **Material of gloves**
A recommendation for a suitable glove material is not available. Testing will be required to determine the suitability of any potential glove materials.
- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
No relevant information available.
- **Risk management measures** No relevant information available.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

· **Form:** Granular or powdered solid.

· **Color:** Grey, green.

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Melting point/Melting range:** 1454 °C (2649.2 °F)

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** The product is not flammable.

· **Flammability (solid, gaseous):** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits

· **Lower:** Not determined.

· **Upper:** Not determined.

· **Oxidizing properties:** Non-oxidizing.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 3 g/cm³ (25.04 lbs/gal)

· **Relative density:** Not determined.

· **Vapor density:** Not applicable.

· **Evaporation rate:** Not applicable.

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- **Solubility in / Miscibility with Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Other information** No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** Possible in traces.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Sensitizing effect by skin contact is possible with prolonged exposure.

· **IARC (International Agency for Research on Cancer):**

| | | |
|-------------|------------------------------------|----------------|
| 11099-02-8 | Nickel oxide | 1 (Inhalation) |
| 112926-00-8 | Silicon oxide, amorphous | 3 |
| 1309-37-1 | Diiron trioxide / iron (III) oxide | 3 |
| 1308-38-9 | Chromium (III) oxide | 3 |

· **NTP (National Toxicology Program):**

| | | |
|------------|--------------|---|
| 11099-02-8 | Nickel oxide | K |
|------------|--------------|---|

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

None of the ingredients are listed.

· **Probable route(s) of exposure:**

- Ingestion.
- Inhalation.
- Eye contact.
- Skin contact.

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- **Acute effects (acute toxicity, irritation and corrosivity):** No relevant information available.
- **Repeated dose toxicity:** Danger of serious damage to health by prolonged exposure.
- **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:**
Causes damage to the lung and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
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 packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|----------------|
| · UN-Number | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · UN proper shipping name | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · Transport hazard class(es) | |
| · DOT, ADR/RID/ADN, IMDG, IATA | |
| · Class | Not regulated. |
| · Packing group | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |

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- | | |
|--|-----------------|
| · Environmental hazards | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

| | |
|-----------|----------------|
| 1344-28-1 | Aluminum oxide |
|-----------|----------------|

| | |
|------------|--------------|
| 11099-02-8 | Nickel oxide |
|------------|--------------|

| | |
|-----------|----------------------|
| 1308-38-9 | Chromium (III) oxide |
|-----------|----------------------|

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

| | |
|------------|--------------|
| 11099-02-8 | Nickel oxide |
|------------|--------------|

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **EPA (Environmental Protection Agency):**

| | | |
|-----------|----------------------|--------|
| 1308-38-9 | Chromium (III) oxide | D, CBD |
|-----------|----------------------|--------|

· **IARC (International Agency for Research on Cancer):**

| | | |
|-------------|--------------------------|---|
| 112926-00-8 | Silicon oxide, amorphous | 3 |
|-------------|--------------------------|---|

| | | |
|-----------|------------------------------------|---|
| 1309-37-1 | Diiron trioxide / iron (III) oxide | 3 |
|-----------|------------------------------------|---|

| | | |
|-----------|----------------------|---|
| 1308-38-9 | Chromium (III) oxide | 3 |
|-----------|----------------------|---|

| | | |
|------------|--------------|---|
| 11099-02-8 | Nickel oxide | 1 |
|------------|--------------|---|

· **Canadian Domestic Substances List (DSL):**

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| | | | |
|-------------|------------------------------------|--|---|
| 112926-00-8 | Silicon oxide, amorphous | | * |
| 1309-48-4 | Magnesium oxide | | * |
| 1309-37-1 | Diiron trioxide / iron (III) oxide | | * |
| 1344-28-1 | Aluminum oxide | | * |
| 1305-78-8 | Calcium oxide | | * |
| 1308-38-9 | Chromium (III) oxide | | * |

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
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- OSHA: Occupational Safety & Health Administration
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- Carc. 1A: Carcinogenicity – Category 1A
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· **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