



# SAFETY DATA SHEET

## 1. Identification

**Product identifier**                      **Vitrified Bonded Abrasives**

**Other means of identification**        None.

**Recommended use**                      Industrial use.

**Recommended restrictions**            None known.

### **Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**                              CGW Camel Grinding Wheel Works Ltd.

**Address**                                      Kibbutz Sarid 3658900 Israel

**Telephone number**                        +972-4-6507216

**e-mail**                                        sales@cgwheels.com

**Contact person**                            Joseph O'Mera

**Supplier**                                      CGW Camel Grinding Wheels, Inc.

**Address**                                      7525 N Oak Park Ave. Niles, IL 60714 United States

**Telephone number**                        800-447-3731

**e-mail**                                        sales@cgwcamel.com

**Emergency telephone number**        800-447-3731

## 2. Hazard(s) identification

**Physical hazards**                          Not classified.

**Health hazards**                            Not classified.

**OSHA defined hazards**                  Not classified.

### **Label elements**

**Hazard symbol**                            None.

**Signal word**                                None.

**Hazard statement**                        The mixture does not meet the criteria for classification.

### **Precautionary statement**

**Prevention**                                Observe good industrial hygiene practices.

**Response**                                 Wash hands after handling.

**Storage**                                    Store away from incompatible materials.

**Disposal**                                  Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)**        None known.

**Supplemental information**              None.

## 3. Composition/information on ingredients

### **Mixtures**

| Chemical name       | CAS number | %       |
|---------------------|------------|---------|
| Aluminum oxide      | 1344-28-1  | 40 - 95 |
| Crystallized silica | 60676-86-0 | 5 - 25  |

**Composition comments**                  All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

|                                                                        |                                                                                                                  |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Inhalation                                                             | Move to fresh air. Call a physician if symptoms develop or persist.                                              |
| Skin contact                                                           | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| Eye contact                                                            | Rinse with water. Get medical attention if irritation develops and persists.                                     |
| Ingestion                                                              | Rinse mouth. Get medical attention if symptoms occur.                                                            |
| Most important symptoms/effects, acute and delayed                     | Direct contact with eyes may cause temporary irritation.                                                         |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically.                                                                                           |
| General information                                                    | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire-fighting measures

|                                                               |                                                                                               |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Suitable extinguishing media                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).                                   |
| Unsuitable extinguishing media                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| Specific hazards arising from the chemical                    | During fire, gases hazardous to health may be formed.                                         |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions                          | Use water spray to cool unopened containers.                                                  |
| Specific methods                                              | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| General fire hazards                                          | No unusual fire or explosion hazards noted.                                                   |

## 6. Accidental release measures

|                                                                     |                                                                                                                                              |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | Avoid inhalation of dust and contact with skin and eyes. Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up               | Sweep up or gather material and place in appropriate container for disposal. For waste disposal, see section 13 of the SDS.                  |
| Environmental precautions                                           | Avoid discharge into drains, water courses or onto the ground.                                                                               |

## 7. Handling and storage

|                                                              |                                                                                                                 |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling                                | Avoid inhalation of dust and contact with skin and eyes. Observe good industrial hygiene practices.             |
| Conditions for safe storage, including any incompatibilities | Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). |

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                     | Type | Value    | Form                 |
|--------------------------------|------|----------|----------------------|
| Aluminum oxide (CAS 1344-28-1) | PEL  | 5 mg/m3  | Respirable fraction. |
|                                |      | 15 mg/m3 | Total dust.          |

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components                           | Type | Value     |
|--------------------------------------|------|-----------|
| Crystallized silica (CAS 60676-86-0) | TWA  | 0.8 mg/m3 |
|                                      |      | 20 mppcf  |

## US. ACGIH Threshold Limit Values

| Components                     | Type | Value   | Form                 |
|--------------------------------|------|---------|----------------------|
| Aluminum oxide (CAS 1344-28-1) | TWA  | 1 mg/m3 | Respirable fraction. |

## US. NIOSH: Pocket Guide to Chemical Hazards

| Components                           | Type | Value   |
|--------------------------------------|------|---------|
| Crystallized silica (CAS 60676-86-0) | TWA  | 6 mg/m3 |

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Biological limit values</b>                                               | No biological exposure limits noted for the ingredient(s).                                                                                                                                                                                                                                                                                                                                    |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| <b>Individual protection measures, such as personal protective equipment</b> |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Eye/face protection</b>                                                   | Wear safety glasses with side shields (or goggles).                                                                                                                                                                                                                                                                                                                                           |
| <b>Skin protection</b>                                                       |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Hand protection</b>                                                       | Wear protective gloves. Suitable gloves can be recommended by the glove supplier.                                                                                                                                                                                                                                                                                                             |
| <b>Other</b>                                                                 | Normal work clothing (long sleeved shirts and long pants) is recommended.                                                                                                                                                                                                                                                                                                                     |
| <b>Respiratory protection</b>                                                | In case of insufficient ventilation, wear suitable respiratory equipment.                                                                                                                                                                                                                                                                                                                     |
| <b>Thermal hazards</b>                                                       | Wear appropriate thermal protective clothing, when necessary.                                                                                                                                                                                                                                                                                                                                 |
| <b>General hygiene considerations</b>                                        | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.                                                                                                                                                                         |

## 9. Physical and chemical properties

### Appearance

|                       |          |
|-----------------------|----------|
| <b>Physical state</b> | Solid.   |
| <b>Form</b>           | Wheel    |
| <b>Color</b>          | Various. |

**Odor** None.

**Odor threshold** Not available.

**pH** Not applicable.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Non flammable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not applicable.

|                                  |                 |
|----------------------------------|-----------------|
| <b>Decomposition temperature</b> | Not available.  |
| <b>Viscosity</b>                 | Not applicable. |
| <b>Other information</b>         |                 |
| <b>Explosive properties</b>      | Not explosive.  |
| <b>Oxidizing properties</b>      | Not oxidizing.  |

## 10. Stability and reactivity

|                                           |                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.                                                   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.                                                          |
| <b>Incompatible materials</b>             | Strong oxidizing agents.                                                                      |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.                                                |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                         |
|---------------------|-----------------------------------------|
| <b>Inhalation</b>   | Prolonged inhalation may be harmful.    |
| <b>Skin contact</b> | Mechanical irritation of skin.          |
| <b>Eye contact</b>  | Dust or powder may irritate eye tissue. |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.  |

|                                                                                     |                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Direct contact with eyes may cause temporary irritation. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|

### Information on toxicological effects

|                                          |                                         |
|------------------------------------------|-----------------------------------------|
| <b>Acute toxicity</b>                    | Not expected to be acutely toxic.       |
| <b>Skin corrosion/irritation</b>         | Mechanical irritation of skin.          |
| <b>Serious eye damage/eye irritation</b> | Dust or powder may irritate eye tissue. |

### Respiratory or skin sensitization

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.                             |
| <b>Skin sensitization</b>        | This product is not expected to cause skin sensitization. |

|                               |                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Germ cell mutagenicity</b> | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|

|                        |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| <b>Carcinogenicity</b> | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
|------------------------|---------------------------------------------------------------------------------|

### IARC Monographs. Overall Evaluation of Carcinogenicity

|                                      |                                                     |
|--------------------------------------|-----------------------------------------------------|
| Crystallized silica (CAS 60676-86-0) | 3 Not classifiable as to carcinogenicity to humans. |
|--------------------------------------|-----------------------------------------------------|

### NTP Report on Carcinogens

Not listed.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

|                                                           |                                                                              |
|-----------------------------------------------------------|------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects. |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.                                                              |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.                                                              |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard.                                                    |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful.                                         |

## 12. Ecological information

|                                      |                                                                                                                                                                                                    |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | No data is available on the degradability of this product.                                                                                                                                         |

|                                  |                                                                                                                                                                                         |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bioaccumulative potential</b> | No data available.                                                                                                                                                                      |
| <b>Mobility in soil</b>          | No data available.                                                                                                                                                                      |
| <b>Other adverse effects</b>     | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

### 13. Disposal considerations

|                                              |                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.                                                                                                                             |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.                                                                                                                                                           |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.                                                                                                   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

#### SARA 313 (TRI reporting)

| Chemical name  | CAS number | % by wt. |
|----------------|------------|----------|
| Aluminum oxide | 1344-28-1  | 40 - 95  |

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Aluminum oxide (CAS 1344-28-1)  
Crystallized silica (CAS 60676-86-0)

### US. New Jersey Worker and Community Right-to-Know Act

Aluminum oxide (CAS 1344-28-1)  
Crystallized silica (CAS 60676-86-0)

### US. Pennsylvania Worker and Community Right-to-Know Law

Aluminum oxide (CAS 1344-28-1)  
Crystallized silica (CAS 60676-86-0)

### US. Rhode Island RTK

Aluminum oxide (CAS 1344-28-1)

### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                          | Yes                    |
| New Zealand                 | New Zealand Inventory                                                  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

|               |                                                    |
|---------------|----------------------------------------------------|
| Issue date    | 12-August-2015                                     |
| Revision date | -                                                  |
| Version #     | 01                                                 |
| HMIS® ratings | Health: 1<br>Flammability: 0<br>Physical hazard: 0 |

### NFPA ratings



### Disclaimer

CGW Camel Grinding Wheels cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.