

Safety Data Sheet

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

Printing date 22.05.2015

Revision: 22.05.2015

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

· **1.1 Product identifier**

· **Trade name:** Calcined Aluminas

· **Article number:**

Polishing Aluminas: 7900

Industrial Grade Precision Alumina "IGPA": 7920

5.0F: 7922

A-5: 7928

Levigated Alumina "LEVI": 7930

Electronics Grade Precision Alumina "EGPA": 7921

"E-POWDERS"

E67: 9406

E70: 9407

E111H: 9410

E266: 7987

E300: 7989

E330: 7988

E390: 7985

E440: 7983

E490: 7986

E500: 7990

E600: 7991

E700: 7992

· **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** Preparation of ceramic parts and coatings

· **1.3 Details of the supplier of the Safety Data Sheet**

· **Manufacturer/Supplier:**

Saint-Gobain Ceramic Materials

1 New Bond Street, P.O. Box 15137

Worcester, MA 01615-0137

tel 1-800-243-0028

· **1.4 Emergency telephone number:**

CHEMTREC

1-800-424-9300 (US/Canada)

+01 703-527-3887 (International)

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 OSHA GHS regulations within the United States.

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

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.
- **Additional information:**
There are no other hazards not otherwise classified that have been identified.
0 percent of the mixture consists of component(s) of unknown toxicity

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
This product does not have a classification according to the CLP regulation.
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard-determining components of labelling:** None.
- **Hazard statements** Not Regulated
- **Precautionary statements** Not Regulated
- **Hazard description:**
- **WHMIS-symbols:** Not hazardous under WHMIS.
- **NFPA ratings (scale 0 - 4)**



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



- | |
|--|
| · HMIS Long Term Health Hazard Substances |
| None of the ingredients are listed. |

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | |
|-------------------------------------|---|---------|
| CAS: 1344-28-1 EINECS: 215-691-6 | aluminium oxide substance with a Community workplace exposure limit | ≥ 98,7% |
| CAS: 1305-78-8 EINECS: 215-138-9 | calcium oxide Xi R37/38-41 Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335 | < 0,3% |
| CAS: 1309-37-1 EINECS: 215-168-2 | diiron trioxide / iron (III) oxide substance with a Community workplace exposure limit | < 0,2% |

Additional information:

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.
For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

After eye contact:

Remove contact lenses if worn, if possible.

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

Breathing difficulty

Coughing

Slight irritant effect on skin and mucous membranes.

Slight irritant effect on eyes.

Hazards Danger of impaired breathing.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use fire extinguishing methods suitable to surrounding conditions.
- **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.
- **Additional information** No further relevant information available.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Avoid formation of dust.
Do not breathe dust.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Avoid release to the environment.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose of the material collected according to regulations.
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**
Use only in well ventilated areas.
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:** Keep container tightly sealed.

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Trade name: **Calcined Aluminas**· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:****1344-28-1 aluminium oxide**

| | |
|-------------|--|
| PEL (USA) | Long-term value: 15*; 15** 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 respirable, as Al |
| EV (Canada) | Long-term value: 10 mg/m ³ total dust |

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 |

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

| | |
|-------------|--|
| PEL (USA) | Long-term value: 10* 15** 5*** mg/m ³ *Fume; Rouge: **Total dust, ***respirable |
| 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 |

· **DNELs** No further relevant information available.· **PNECs** No further relevant information available.· **Additional information:** The lists valid during the making were used as basis.

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- **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.
Do not breathe dust.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Not required under normal conditions of use.
Use suitable respiratory protective device when high concentrations are present.
For large spills, respiratory protection may be advisable.
- **Protection of hands:**
Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388.
- **Eye protection:**



Safety glasses

- **Body protection:**
Not required under normal conditions of use.
Protection may be required for spills.
- **Limitation and supervision of exposure into the environment** Avoid release to the environment.
- **Risk management measures** See Section 7 for additional information.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

| | |
|------------------|--------------------|
| Form: | Crystalline powder |
| Colour: | Whitish |
| Odour: | Odourless |
| Odour threshold: | Not determined. |
- pH-value at 20 °C (68 °F): 8,0-9,5
- **Change in condition**

| | |
|------------------------------|---------------------|
| Melting point/Melting range: | >2000 °C (>3632 °F) |
| Boiling point/Boiling range: | >2900 °C (>5252 °F) |
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Auto/Self-ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.

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- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapour pressure:** Not applicable.
- **Density at 20 °C (68 °F):** 3,9 g/cm³ (32,546 lbs/gal)
- **Relative density** Not determined.
- **Vapour density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with water:** Insoluble.
- **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**
- **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** No further relevant information available.
- **10.5 Incompatible materials:** Oxidizers, strong bases, strong acids
- **10.6 Hazardous decomposition products:** Toxic metal compounds

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect:**
 - on the skin:** Slight irritant effect on skin and mucous membranes.
 - on the eye:** Slight irritant effect on eyes.
- **Sensitisation:** No sensitising effects known.
- **Subacute to chronic toxicity:** No further relevant information available.

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· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

- **Acute effects (acute toxicity, irritation and corrosivity):** None.
- **Repeated dose toxicity:** No further relevant information available.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):** None.

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.
- **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.

SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **14.2 UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **14.3 Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Not Regulated

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- **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 Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

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):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

Present in trace quantities.

| | |
|------------|------------------|
| 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)

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

· TLV (Threshold Limit Value established by ACGIH)

| | | |
|-----------|-----------------|----|
| 1344-28-1 | aluminium oxide | A4 |
|-----------|-----------------|----|

| | | |
|-----------|------------------------------------|----|
| 1309-37-1 | diiron trioxide / iron (III) oxide | A4 |
|-----------|------------------------------------|----|

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

None of the ingredients are listed.

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- **Canada**

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

All ingredients are listed.

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

None of the ingredients are listed.

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

All ingredients are listed.

- **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

- **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

- **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.

- **Relevant phrases**

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

- **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

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- **Sources**

SDS Prepared by:

ChemTel Inc.

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