

Date of creation: 12 May 2016 Date of current version: 2 October 2017

SECTION 1. MIXTURE / SUBSTANCE IDENTIFICATION AND COMPANY IDENTIFICATION

1.1. Product identification

Glass Abrasive

Product code: -

1.2. Identified significant mixture/substance usage and inadvisable applications

Identified significant usage: For road and highway horizontal marking; for abrasive blasting. Inadvisable applications: All other usages different from mentioned above.

1.3. Details of the provider of material safety data sheet

Distributor

Sinterit Sp. z o.o. 30-504 Kraków ul. Kalwaryjska 69/9 Poland +48 570 967 854 contact@sinterit.com

Person responsible for Material Safety Data Sheet: contact@sinterit.com

1.4. Emergency number

<u>112</u> (EU international emergency number) or <u>+48 570 967 860</u> (Sinterit support). Polish National Toxicological Consultant: <u>+48 607218174</u>

SECTION 2. HAZARD IDENTIFICATION

2.1. Mixture / substance qualification

<u>Mixture / substance qualification according to Regulation (EC) No 1272/2008.</u> Mixture/substance is not qualified as dangerous or hazardous.

2.2. Markings

Not applicable. Phrase H concerning Danger types are not applicable. Phrase P concerning Precaution types are not applicable.

2.3. Other hazards

Results of PBT and vPvB danger types evaluation - Not applicable. Non organic product.

SECTION 3. COMPOSITION AND COMPONENTS INFORMATION

3.1. Substances



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Not applicable.

3.2. Mixtures

According to the manufacturer's declaration, product does not contain any concentrated dangerous substances in concentration that exceeds limited values identified in SECTION 8.

Silicon Dioxide (SiO 2)

Content: 70-74% CAS: 14808-60-7 EG/EC: 215-684-8 Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Aluminium Trioxide (Al₂O₃)

Content: 0,5 - 2% CAS: 1344-28-1 EG/EC: 215-691-6 Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Calcium Oxide (CaO)

Content: 7 - 11% CAS: 1305-78-8 EG/EC: 215-138-9 Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Magnesium Oxide (MgO)

Content:3 -5 %CAS NUMBER:1309-48-8EG/EC:215-171-9Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Sodium Dioxide (Na₂0)

Content:13-15% (including Potassium Oxide)CAS NUMBER:1313-59-3EG/EC:215-208-9Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Potassium Oxide (K₂O)

Content:13-15% (including Sodium Oxide)CAS NUMBER:12136-45-7EG/EC:235-227-6Qualification according to Regulation (EC) No 1272/2008: Not applicable.

Titanium dioxide (TiO₂)

Content: max. 0.1% CAS NUMBER: 13463-67-7



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EG/EC: 236-675-5 Qualification according to Regulation (EC) No 1272/2008: Not applicable.

SECTION 4. FIRST AID MEASURES

4.1. First aid measures description

Inhalation

Do not inhale powders. Injured person should be taken to fresh air, and ensured with warm and calm. If any symptoms maintain a doctor should be asked for advice showing a label or Material Data Sheet.

Skin contact

Remove contaminated clothing, If accidental skin contact occurs, wash immediately with lots of water with soap for at least 15 minutes. A doctor contact may be required if symptoms persist.

Contaminated clothing should be washed before next use.

Eye contact

If accidental eye contact occurs, wash immediately with lots of water for at least 15 minutes, eyelids should be rolled up. Meanwhile contact lenses should be removed if they are easy to remove.

An eye-doctor contact may be required if symptoms persist.

Swallowing

If accidental swallowing of abrasive occurs, mouth should be rinsed out with lots of water. A doctor contact may be required if symptoms persist.

4.2. SEVERE AND DELAYED EXPOSURE SYMPTOMS

Severe exposure symptoms

Product is not classified as dangerous or hazardous in case of severe exposure (Section 10).

Persistent exposure symptoms

There are no data on product persistent exposure. Product is not classified as dangerous or hazardous in case of persistent exposure (Section 10).

4.3. INDICATIONS OF IMMEDIATE DOCTOR ASSISTANCE AND PARTICULAR INJURIES CARE

Main recommendations:

A doctor contact may be required if doubts or symptoms persist. It is prohibited to put anything in mouth or conjure vomits to a person that is unconscious or suffer a convulsions seizures. Remove contaminated clothing immediately and avoid eye or skin contamination.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishants.

Proper extinguishing agents:

Non-flammable product. In case of fire use proper extinguishants paying attention to surroundings and type of burning material.

Improper extinguishing agents:

Depend of fire surrounding and type of burning material.

5.2. Particular mixture / substance hazards.

No data available.



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5.3. Information for Fire Department.

Depending on fire intensity, wear protective gear and oxygen mask. Used extinguishants should be collected and removed according to current country regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.

For non-emergency personnel:

In contamination area access for outsiders should be prohibited, especially when big amount of product is released. For emergency responders:

Avoid eye and skin contamination. Be advised to wear suitable protective equipment (including personal protective equipment referred to under Section 7-8 of the safety data sheet).

6.2. Environmental precautions.

Advice shall be provided on any environmental precautions to be taken related to accidental spills and release of the substance or mixture, such as keeping away from drains, surface and groundwater.

6.3. Methods and material for containment and cleaning up.

Spilled but not contaminated product should be mechanically collected and reused. It is recommended to collect spilled product with a vacuum cleaner. Contaminated product should be mechanically collected and stored in marked containers. Contaminated surfaces should be washed off with water. All wastes should be removed according to SECTION 13.

6.4. Reference to other sections.

If appropriate Sections 8 and 13 shall be referred to.

SECTION 7. HANDLING AND STORAGE.

7.1. Precautions for safe handling.

Recommendations regards worksites and proceedings during storage.
Do not inhale the powder. Avoid eye and skin contamination. Provide proper air circulation.
Remove contaminated clothing immediately and wash before next use.
Eating, drinking and smoking is prohibited during work with product.
It is prohibited to storage a food product in a work area. Hands should be washed before and after every work brake.
Always wear personal protective equipment (SECTION 8).
Fire & explosion protection information:
No specific recommendations:

Be advised of the recommendations placed on product label.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in original, properly marked and sealed containers in dry conditions and well ventilated room.

7.3. Specific end use(s)

No specific end use(s) information.



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SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION.

8.1. Control parameters.

Recommended occupational exposure limits in a work area according to the national legislation: Aluminium Trioxide (Al_2O_3) (in reference to Al)

Respirable fraction: NDS - 1,2 mg/m³; NDSCh - Not applicable; NDSP - Not applicable. Inhalable fraction: NDS - 2,5 mg/m³; NDSCh - Not applicable; NDSP - Not applicable. Regulation: PN-Z-04263-1:2000.

Calcium Oxide (CaO)

Respirable fraction: NDS - 1 mg/m³; NDSCh - 4 mg/m³; NDSP - Not applicable. Inhalable fraction: NDS - 2 mg/m³; NDSCh - 6 mg/m³; NDSP - Not applicable. Regulations: PN-87/Z-04156.02, PN-86/Z-04157.02, PN-90/Z-04157.03.

Dusts

Other non-toxic industrial dusts including free crystalline silica level below 2%. Inhalable fraction: NDS - 10 mg/m³; NDSCh - Not applicable ; NDSP - Not applicable. Regulations: PN-91/Z-01001/01, PN-091-04030/05, PN-91/Z-04939/06.

Substance concentration limits including biological material limit values :

DNEL substance values - product components in acute or chronic exposition - Not applicable. PNEC substance values - product components for the aquatic environment and biological sewage treatment plants - Not applicable.

8.2. Exposure controls.

Work areas (including local area if needed) should be provided with proper air ventilation system. Do not inhale product powders.

Respiratory protection:

In conditions for the use respiratory protection is not required. In case of high concentration in the air always wear proper respiratory passages protective gear with P1 filter. In emergency and when the concentration in the air is unknow wear respiratory protective gear with independent Ventilation.

Eye protection:

Avoid contact with eyes. Use proper and sealed protection glasses according to EN166 regulation.

Hands protection:

Wear proper protective gloves. Performance of protective gloves is different for various gloves built material and manufacturers. Protection time may be different for each gloves manufacturers. For many substances there is no possibility to estimate the protection time. Considering various manufacturers and models data provided the protection time may be different.

Body protection:

Standard protective clothing. Wear proper protective clothing with long sleeves, overalls etc. Contaminated clothes should be washed before next use.



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General recommendations:

Contaminated clothes should be removed immediately. Hands should be washed after every work break. Avoid eye and skin contamination. Avoid environmental contamination.

SECTION 9. PHYSICAL AND CHEMICAL CHARACTERISTICS.

9.1. Information about basic physical and chemical characteristic,

Appearance:	Solid, micro glass balls diameter of 1 to 850 $\mu m.$
Colour:	Clear - colourless
Smell:	Odourless
Density:	2,5 g /cm ³
Hardness on the Mohs scale:	6
Softening temperature:	750°C
Water-solubility:	Not soluble material.
Flash point:	Not applicable, non-flammable.
Self-ignition point:	Not applicable.

9.2. Other information.

No data available.

SECTION 10. STABILITY AND REACTIVITY.

10.1. Reactivity

No data available

10.2. Chemical stability

Stable product according to reference storage and maintenance conditions as specified in

SECTION 7.

10.3. Possibility of dangerous reaction occurrence.

Not applicable in reference storage and maintenance conditions.

10.4. Conditions that should be avoided.

Product stable in reference storage and maintenance conditions.

10.5. Incompatible materials.

Hydrofluoric acid.

10.6. Hazardous decomposition products.

Not known.

SECTION 11. TOXICOLOGICAL INFORMATION.



MATERIAL SAFETY DATA SHEET

GLASS ABRASIVE

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11.1. Information on toxicological effects. Mixtures The relevant hazard classes: No data for the product. Acute toxicity. Calculation methodology, Product is not gualified as dangerous or hazardous in acute toxicity. Corrosivity and skin irritation. Product dust may be irritating skin in effect of mechanical damage. Product is not qualified as dangerous in this class. Serious eye damage / irritation. Product dust may cause eye damage in effect of mechanical damage. Product is not qualified as dangerous in this class. Respiratory/skin sensitisation. No data for the product. Product is not qualified as dangerous in this class. Germ cell mutagenicity or reproductive toxicity. No data for the product. Product is not qualified as dangerous in this class. Carcinogenic No data for the product. Product is not qualified as dangerous in this class. Reproductive toxicity No data for the product. Product is not qualified as dangerous in this class. **Target Organ Systemic Toxicity** Single exposure No data for the product. Product is not gualified as dangerous in this class. Repeated exposure No data for the product. Product is not qualified as dangerous in this class. Aspiration hazard No data for the product. Product is not qualified as dangerous in this class. Delayed, immediate and chronic effects from short- and long-term exposure. Effects of acute exposure: Product is not qualified as dangerous in acute exposure. Effects of chronic exposure: No data for the product. Product is not qualified as dangerous in chronic exposure.

SECTION 12. ECOLOGICAL INFORMATION.

12.1. Toxicity

Acute aquatic toxicity:

Product is not qualified as dangerous for the environment. It is important to avoid a product discharge to groundwater and sewage. **Chronic aquatic toxicity:** No data for the product.

Toxicity for microorganisms:

No data for the product.

Toxicity to organisms in the terrestrial environment.



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No data for the product. **Toxicity to atmospheric environment.** No data for the product.

- 12.2. Persistence and degradability No data for the product.
- 12.3. Bioaccumulation No data for the product.
- 12.4. Mobility in soil No data for the product.
- 12.5. Results of the PBT and vPvB assessment. No data for the product.
- 12.6. Other adverse effects: No data for the product.

SECTION 13. WASTE MANAGEMENT.

13.1. Waste disposal methods:

Management of product waste - Disposal in accordance with the local/national legislation, if recycling equipment is Available.

Do not discharge to groundwaters or sewage.

Product and it's packaging should be removed with safety precautions and in accordance with the local/national legislation.

Waste classification: Not specified.

According producent data, permanent waste, not qualified as dangerous.

Waste disposal - Empty containers should be completely drained, uncleaned and dirty containers should be threaten

as

a product waste. Do not remove a labels from empty containers. Waste disposal method should be agreed with the local Environmental Health Department.

SECTION 14. INFORMATION ON TRANSPORTATION.

Product is not classified as dangerous in international and domestic transport.

14.1. UN Number: Not applicable.

- 14.2. UN proper shipping name: Not applicable.
- 14.3. Transport hazard class(es): Not applicable.
- 14.4. Packing group: Not applicable.
- 14.5. Environmental hazards: Not applicable.
- 14.6. .Special precautions for user: Not applicable.



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14.7. Transport in bulk according to Annex II of MARPOL 73/78 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.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and | repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance).

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC

and

1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance).

Government Statement of 16 January 2009 on taking effect of Annex A and B to the European Contract on International road transport of hazardous goods (ADR), made up in Geneva on 30 September 1957 (Dz.U. No.27,item 162). Regulation of the Minister of Labour and Social Policy of 6 June 2014 on Maximum Permissible Concentration and Intensity of Agents Harmful to Health in the Working Environment (Dz. u. z. 2014, poz 817). Health minister notice of 12 January 2015 on publication of the consolidated text of the Health minister regulations on criteria and classification of chemical substances and preparations (Dz. U.2015 no.0, pos 208).

Regulation of Minister of Health dated December 21, 2005 concerning the principle demands for agents of individual protection measures (Journal of Law dated 2005 no 259, item 2173). Regulation of Minister of Health dated December 30, 2004 on safety, hygiene and health for chemical agents at work (Dz. U. 05. 11. 86. with later amendments). The Waste Management Act of 14 December 2012 (Dz. U. 2013 nr 0 pos. 21. with later amendments). Regulation of the ministry of environment on the catalogue of waste. (Dz. U. 2014, pos. 1923.). Act of 13 June 2013 of management of packaging and packaging waste (Dz. U. 2013. 888). Directives 2000/39/EC, 2006/15/EC i 2009/161/EC of establishing a first, second and third list of indicative occupational exposure limit values.

15.2. Chemical Safety Assessment

Chemical Safety Assessment - product components - Not applicable.

SECTION 16. OTHER INFORMATION

A key or legend to abbreviations and acronyms used in the safety data sheet.

ADR - (formally, the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)).

PBT - Persistent, bioaccumulative and toxic substance.



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vPvB - A substance of very high concern.

Update the Safety Data Sheet: Update the Safety Data Sheet according to Commission Regulation (EC) 2015 / 830 dated on 28 May 2015.

Material safety data sheet was developed on the basis of a polish safety data sheet dated on 24 May 2015, documentation provided by the manufacturer and information gathered from database.

According to polish legislation regarding mixture and chemical substance provided by Eko-Futura Sp. z o.o. Safety Data Sheet is based on data supplied by the manufacturers of the components of the preparation, national provisions in force at the time of the charter and information contained in the Safety Data Sheet should be regarded only as an aid to the safe use as well as in transport, distribution and storage. The charter is not a product. The information contained in to be transferred to similar products. The author assumes no liability arising from improper use of the information contained in the Safety Data Sheet.