

Prepared in accordance with Commission Regulation (EU) No. 453/2010 of May 20, 2010 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of December 18, 2006 on the Registration, Evaluation, Authorization and Restriction of chemicals (REACH) (EU DU series L No. 133 of May 31, 2010)

Activated Alumina (Al₂O₃)

Date of preparation: 01.01.2020

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1. Identification of the substance and company

1.1. Substance identification

Trade name: Activated alumina (Al₂O₃)

1.2. Use of the substance/preparation

Desiccant, adsorbent for gas and liquid applications, gas purification, gas drying for use in the food industry (food-grade gases).

1.3. Enterprise identification

Company name: ABC-Z System EKO s.c. Bożena Ostrowska-Kochel, Marek, Mateusz Kochel

Address: Przemysłowa 10, 40-020 Katowice

VAT no.: PL9540007045

Phone number: +48 513 944 855

Email address: abc-z@abc-z.pl

1.4. Emergency telephone number

In case of emergency: 112

1.5. Composition and information on ingredients

Substance 1

Component: Aluminium oxide > 90%

CAS: 1344-28-1

EINECS: 215-691-6

2. Hazards identification

2.1. Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

2.2. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

2.3. Other hazards According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known if the regulations/notes for storage and handling are considered.

3. First aid measures

3.1. Description of first aid measures

After eye contact:	rinse with plenty of water with the eyelid held wide open. Seek the help of an ophthalmologist.
After skin contact:	remove all contaminated clothing and wash skin with plenty of water.
After swallowing:	give plenty of water, rinse mouth, call a doctor.
After inhalation:	go to fresh air, call a doctor.

3.2. Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to the product known.

3.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment (decontamination, vital functions).

4. Firefighting measures

Suitable extinguishing agents:	Use extinguishing measures to suit surroundings.
Special hazards arising from the substance or mixture:	No particular hazards known
Advice for firefighters:	Special protective equipment: Wear a self-contained breathing apparatus. Further information: Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

5. Accidental release measures

5.1. Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Do not breathe dust. Avoid contact with the skin, eyes and clothing. Use personal protective clothing.

5.2. Environmental precautions

Discharge into the environment must be avoided.

5.3. Methods and material for containment and cleaning up

Avoid raising dust. Sweep/shovel up. Dispose of adsorbed material in accordance with regulations.

6. Handling and storage

6.1. Precautions for safe handling

Avoid dust formation. Avoid inhalation of dusts. Avoid contact with the skin, eyes and clothing. Provide suitable exhaust ventilation at the processing machines.

Protection against fire and explosion: The substance/product is not an oxidizer, noncombustible and not explosive.

6.2. Conditions for safe storage, including any incompatibilities

Keep away from water.

6.3. Packaging

Suitable materials for containers: carbon steel (iron), Low density polyethylene (LDPE). Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

7. Exposure controls/personal protection

Control parameters

Additional information about design of technical facilities: No further data

Personal protective equipment

Respiratory protection:	Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)
Eye protection:	Safety glasses with side-shields (frame goggles) (e.g. EN 166)
Hand protection:	Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.
Body protection:	No body protection required if used for intended purpose and satisfying generally accepted industrial hygiene rules.

General safety and hygiene measures

Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift.

8. Physical and chemical properties

Form:	Beads
Colour:	White
Odour:	Odourless
pH:	Not available
Boiling point:	Not available
Melting point:	2000°C
Flash point:	Non-flammable
Evaporation rate:	Not applicable
Flammability:	Does not ignite
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Solubility in water:	Not soluble
Thermal decomposition:	No decomposition if correctly stored and handled
Viscosity, dynamic:	Not applicable the product is a solid
Self ignition:	Not self-igniting
Bulk density:	750-950 kg/m ³

9. Stability and reactivity

Reactivity:	No hazardous reactions if stored and handled as prescribed/indicated. Corrosion to metals: No corrosive effect on metal. Formation of flammable gases: Forms no flammable gases in the presence of water.
Chemical stability:	The product is chemically stable.
Possibility of hazardous reactions:	No hazardous reactions known. The product is chemically stable.
Conditions to avoid:	Avoid dust formation. Avoid humidity
Incompatible materials:	Substances to avoid: water
Hazardous decomposition products:	No hazardous decomposition products known

10. Toxicological information

Acute Toxicity

- LD50 oral >2000 mg/kg – rat
- LD50 dermal Non-irritating to the skin – rabbit

• LC50 (1 h) inhalation:	>2.3 mg/l - 4 h aerosol – rat.
Corrosive/Irritant Effects:	No irritating effect on skin.
Serious Eye Damage/Eye Irritation:	Not classified as causing serious eye damage or irritation.
Respiratory or Skin Sensitization:	Not classified as a respiratory or skin sensitizer.
Summary of CMR (Carcinogenic, Mutagenic, Reproductive Toxicity) Properties:	Not classified as germ cell mutagenic, carcinogenic, or toxic to reproduction.
Specific Target Organ Toxicity - Single Exposure:	Not classified as toxic to specific target organs (single exposure).
Specific Target Organ Toxicity - Repeated Exposure:	Not classified as toxic to specific target organs (repeated exposure).
Aspiration Hazard:	Not classified as an aspiration hazard.
Symptoms Related to Physical, Chemical, and Toxicological Characteristics:	
• If swallowed:	No data available.
• If in eyes:	No data available.
• If inhaled:	No data available.
• If on skin:	No data available.
Additional Information:	-

11. Ecological information

Toxicity	no available data
Persistence and degradability	no available data
Bioaccumulative potential	no available data
Soil mobility	no available data
Results of PBT and vPvB assessment	no PBT/vPvB assessment was conducted as it is not required / no chemical safety assessment was performed
Other adverse effects	no available data

12. Waste treatment methods

Dispose of in accordance with national, state and local regulations.
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

13. Transport information

13.1. UN Number or ID Number

Not subject to transport regulations

13.2. UN Proper Shipping Name

Not assigned

13.3. Transport Hazard Class(es)

None

13.4. Packing Group

Not assigned

13.5. Environmental Hazards

Not considered hazardous to the environment according to dangerous goods regulations

13.6. Special Precautions for User

No additional information available

13.7. Transport in Bulk According to IMO Instruments

Not intended for bulk transport

13.8. Information for Each of the UN Model Regulations

Transport of dangerous goods by road, rail, and inland waterways (ADR/RID/ADN) Not subject to ADR, RID, and ADN regulations.

International Maritime Dangerous Goods Code (IMDG) Not subject to IMDG regulations

International Civil Aviation Organization Not subject to ICAO-IATA regulations.
(ICAO-IATA/DGR):

14. Regulatory information

14.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

EU Commission Regulation None of the components are listed.
Regulation No. 2015/830, amending
Regulation (EC) No. 1907/2006 (REACH).

- Annex XIV - List of substances subject to authorization procedure. Substances of Very High Concern (SVHC). None of the components are listed.
- Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles. Product intended for professional use only.

14.2. Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

15. Other information

The above information corresponds to the best of our knowledge at the time of publication and is believed to be correct but is not exhaustive and should be used for guidance only as a reference for safe handling of the product for storage, processing, transport and disposal. ABC-Z System EKO s.c. is not responsible for any damage caused as a result of work or contact with the above product.

This safety data sheet has been developed on the basis of the safety data sheet provided by the manufacturer and/or online databases and in compliance with applicable regulations on hazardous chemical substances and preparations.