

SAFETY DATA SHEET

JARO S.A.

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SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product identifier

Chamotte, light weight chamotte, ground chamotte, concrete aggregate

a) Chamotte: PG1; PG2; PG3; PG4;

granulation (mm) 0 - 30

b) Light weight chamotte:

granulation (mm) 0 - 30

PGL 2

c) Ground chamotte: PGM 1 0-0.09 mm; PGM 2 0-0.09 mm;

d) Aggregates for fireproof concrete: Kr BOS 125/5; Kr BOS 135/5; Kr BOS 140/5;

Kr BOS 125/10; Kr BOS 135/10; Kr BOS 140/10;

1.2. Relevant identified use of the substance or mixture and use advised against

Products used as components of masses and refractory products. Uses advised against: other than those mentioned above.

1.3. Details of the supplier of the safety data sheet:

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1.4. Emergency telephone number

Round-the-clock: 112 - general emergency number;

998 - fire brigade; 999 - medical emergency

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

The substance does not meet the classification criteria according to Regulation (EC) No 1272/2008

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP) Not required.

2.3. Other hazards

The inorganic substance does not meet the PBT and vPvB criteria in accordance with Annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances

Name CAS No. Content

Burned clay 93821-35-3 up to 100% Cristobalit 14464-46-1 up to 6%

Burned clay contains small amounts of quartz.

SECTION 4: First aid measures

4.1. Description of first aid measures

After exposure through inhalation — abort exposure by leaving the dusty zone, provide clean air. After contact with skin, wash off with soap and water.



After eye contact, rinse your eyes with water. Contact a doctor if symptoms persist.

After exposure through the digestive tract – contact a doctor.

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

May cause damage to the lungs following prolonged or repeated exposure to inhaled finely divided particles.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media that are suitable to the material burning.

5.2. Special hazards arising from the substance or mixture

Non-combustible, thermally stable.

5.3. Advice for fire-fighters

Basic level of protection. Protective clothing for firefighters in accordance with European standard EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Depending on concentration of pollutants, use appropriate personal protective equipment and provide room ventilation.

6.2. Environmental precautions

Prevent material from entering drains, surface water and groundwater.

6.3. Methods and material for containment and cleaning up

To remove contamination, use extraction systems, industrial vacuum cleaners, and sweepers. Do not let the dirt rise up

Do not use brushes or compressed air for cleaning surfaces or clothing.

6.4. Reference to other sections

Further information in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle packed products carefully. Do not throw bags with burned clay, do not handle the substance if ventilation is defective.

Do not eat and smoke at workplace.

Wash your hands after contact with burned clay.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: dry warehoused, protected from moisture and precipitation.

Packaging materials: sealed packages with adequate strength.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Dusts containing free (crystalline) silica from 2% to 50%

a) inhalable fraction

b) respirable fraction

[14808-60-7], [14464-46-1], [15468-32-3]

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Threshold Limit Value

mg/m³

Monitoring procedure consistent with:

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of health hazard factors in the work environment. Journal of Laws 2011, No. 33, item 166.



8.2. Exposure controls

8.2.1 Appropriate engineering controls.

Ensure proper ventilation and encapsulation of the technological process that involves finely divided burned clay.

8.2.2. Individual protection measures, such as personal protective equipment.

<u>General information</u>: Applicable personal protective equipment needs to comply with the regulation by the Minister of Economy of 28 December 2005 (Journal of Laws no. 259 item 2173) and the directive 89/686/EC (as amended).

Personal protective equipment should be selected for the workplace conditions.

Inhalation: If threshold values are exceeded at the workplace, use a suitable dust mask.

Hands and skin: Apply general personal hygiene measures, wash the dirt with soap and water.

8.2.3. Environmental exposure controls.

Follow your environmental decisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance:

b) Odour:

c) Odour threshold;d) pH: pH(4% suspension)

e) Melting/freezing point

f) Initial boiling point and boiling range

g) Flash point

h) Evaporation rate

i) Flammability (solid, gas)

j) Upper/lower flammability or explosive limits

k) Vapour pressure I) Vapour pressure

m) Relative density

n) Solubility

o) N-octanol/water partition coefficient

p) Auto-ignition temperature

p) Decomposition temperature

r) Viscosity

s) Explosive properties

t) Oxidizing properties

solid, yellow and grey product

Odourless

Not available

6-8 no data

no data

not applicable not applicable

not applicable

non-flammable

not applicable

no data no data

not tested

not soluble in water

not applicable

not applicable

no data not applicable

not applicable

not applicable

9.2. Other Information

There is no information about the mixing capacity and solubility in electric conductive fats or gas group. There is no safety information regarding redox potential, radical potential and photocatalytic properties.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable and non-reactive substance.

10.2. Chemical stability

The substance is stable under normal ambient conditions, and also at the expected temperature and under expected pressure during storage and handling.

10.3. Possibility of hazardous reactions

The substance does not react and does not polymerise.

10.4. Conditions to avoid

There are no known conditions where the substance becomes dangerous.

10.5. Incompatible materials

No information on incompatible materials.

10.6. Hazardous decomposition products

No hazardous decomposition products occur under foreseeable conditions of use and storage.



SECTION 11: Toxicological information

a) acute toxicity;

Based on available data, the classification criteria are not met.

b) skin corrosion/irritation;

Based on available data, the classification criteria are not met.

c) severe damage to eyes/eye irritation;

Based on available data, the classification criteria are not met.

d) allergenic effects on respiratory tracts or skin;

Based on available data, the classification criteria are not met.

e) germ cell mutagenicity;

Based on available data, the classification criteria are not met.

f) carcinogenicity;

Based on available data, the classification criteria are not met.

g) teratogenic effects;

Based on available data, the classification criteria are not met.

h) specific target organ toxicity -single exposure;

Based on available data, the classification criteria are not met.

i) specific target organ toxicity -repeated exposure;

Based on available data, the classification criteria are not met.

i) aspiration hazard.

Based on available data, the classification criteria are not met.

SECTION 12: Ecological Information

12.1. Toxicity: Data not available.

12.2. Persistence and degradability:No data on the degradability of burned clays.

12.3. Bioaccumulative potential:No data available.12.4. Mobility in soil:No data available.12.5. Results of PBT and vPvB assessment:Not applicable.12.6. Other adverse effects:No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods.

Dispose of in conformity with applicable regulations.

Do not dispose of in municipal landfills. Remnants must be stored in original packaging.

Hand over the waste to an authorized disposal facility.

Regulations:

Community legislation: Directives of the European Parliament and of the Council: 2008/98/EC, 94/62/EC.

National legislation: Journal of Laws 2013, item 21, Journal of Laws 2013, No. 63, item. 888

SECTION 14: Transport information

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

The product does not pose a threat to the environment according to the criteria contained in the UN Model Regulations.

14.6. Special precautions for user:

No data

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable

SECTION 15: Regulatory information

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

Act of 25 February 2011 on substances and mixtures thereof (Journal of Laws of 2011, No. 63, item 322 as amended).



Regulation of the Minister of Health of 10 August 2012 on the criteria and classification of chemical substances and mixtures (Journal of Laws of 2012, item 1018 as amended).

Regulation of the Minister of Health of 20 April 2012 on the labelling of dangerous substances and dangerous mixtures and some mixtures (Journal of Laws 2012, item 445, as amended).

Regulation of the Minister of Labour and Social Policy of 6 June 2014 on threshold limit values and concentration of health hazard factors in the work environment (Journal of Laws of 2014, item 817).

The Government Statement of 28 May 2013 on taking effects of the amendments to Annexes A and B to The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (Journal of Laws 2013, item 815).

Waste Act of 14 December 2012 (Journal of Laws 2013, item 21).

The Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws 2013, item 888)

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of health hazard factors in the work environment (Journal of Laws No. 33, item 166 as amended).

REGULATION (EC) 1907/2006 OF THE EUROPEAN PARLIAMENT AND COUNCIL dated December 18, 2006, concerning the registration, evaluation, authorisation, and restriction of chemicals (REACH), and establishing the European Chemicals Agency, amending the Council regulation 1999/45/EC and repealing the Council regulation no. 793/93 and the EC regulation no. 1488/94, as well as the Council directive 76/769/EEC and Commission directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 concerning the 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, as further amended.

2008/98/EC DIRECTIVE OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 19 November 2008 on waste and repealing certain directives.

94/62/EC DIRECTIVE OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 20 December 1994 on packaging and packaging waste.

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance.

SECTION 16: Other information

The Safety Data Sheet has been thoroughly amended and adapted to the current legal requirements.

Explanation of abbreviations and acronyms used in the safety data sheet:

STOT RE 2 – specific target organ toxicity – repeated exposure category 2

H-373 – may cause damage to the lungs following prolonged or repeated exposure to inhaled finely divided particles.

P260 – do not breathe dust/fumes/gas/mist/vapours/spray

P314 – get medical advice/attention if you feel unwell

P501 – dispose of contents/container in accordance with applicable waste regulations.

PBT – persistent, bioaccumulative and toxic substance

vPvB - very persistent and highly bioaccumulative substance

SCOEL - Scientific Committee on Occupational Exposure Limits

IARC - International Cancer Research Agency

CAS - Chemical Abstracts Service

Information contained in this Material Safety Data Sheet is provided based on literature data, the possessed results of the laboratory tests conducted to date by our own laboratory and other laboratories, the experience gained during 65 years of the product manufacturing.

Employees engaged in the marketing and processing of burned clay should undergo training in substance handling, as well as health and safety regulations.

End of the safety data sheet