# 1. Identification of the substance / mixture and of the company / undertaking

## 1.1. Product identifier
Calcined kaolin.

REACH Registr. n°: Exempted in accordance with Annex V.7.

Synonyms: Calcined kaolin, calcined clay, chamotte, metakaolin, grog

Trade names: **MÉTAKAOLIN BRUT**
**ARGICAL-M 1000**
**MK-36**

## 1.2. Relevant identified uses of the substance or mixture and uses advised against
Main applications (non-exhaustive list):
- Ceramics (refractories, sanitaryware, tiles, tableware, enamels, glass, etc.)
- Fillers
- Building materials & cement
- Plastic & rubber
- Paint
- Adhesives & sealants
- Fertilisers and agricultural products

## 1.3. Details of the supplier of the safety data sheet
IMERYS REFRACTORY MINERALS CLÉRAC
La Gare
17270 Clérac
France

Phone N°: +33 546 04 17 11
Fax N°: +33 546 04 18 36

Competent person: Virginie Soleil-Raynaut <product_stewardship_irm@imerys.com>

## 1.4. Emergency telephone number
For France: +33 145 42 59 59 (INRS “urgence produits”)
2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
This product does not meet the criteria for classification as hazardous as defined in Regulation (EC) 1272/2008 and in Directive 67/548/EEC.

This product contains less than 1 % of respirable quartz.

Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica (quartz) may be generated. Prolonged and / or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

This product should be handled with care to avoid dust generation.


2.2. Label elements
None.

2.3. Other hazards
This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACh.

3. COMPOSITION / INFORMATION ON INGREDIENTS

a) Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
<th>EINECS</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin, calcined</td>
<td>100 %</td>
<td>296-473-8</td>
<td>92704-41-1</td>
</tr>
</tbody>
</table>

Calcined kaolin is a UVCB substance (Unknown or Variable composition, Complex reaction products or Biological materials).

b) Main constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>EINECS</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous phase</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

c) Constituent contributing to classification
This product contains less than 1 % of respirable quartz.

4. FIRST AID MEASURES

4.1. Description of first aid measures

a) Eye contact
Rinse with copious quantities of water and seek medical attention if irritation persists.

b) Inhalation
Movement of the exposed individual from the area to fresh air is recommended.
c) Ingestion
No first aid measure required.

d) Skin contact
No first aid measure required.

4.2. Most important symptoms and effects, both acute and delayed
No acute and delayed symptoms and effects are observed.

4.3. Indication of any immediate medical attention and special treatment needed
No specific actions are required.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media
No specific extinguishing media is needed.

5.2. Special hazards arising from the substance or mixture
Non combustible. No hazardous thermal decomposition.

5.3. Advice for firefighters
No specific firefighting protection is required.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.

6.2. Environmental precautions
No special requirements.

6.3. Methods and material for containment and cleaning up
Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.

6.4. Reference to other sections
See sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

Do not to eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
7.2. Conditions for safe storage, including any incompatibilities

Technical measures / precautions
Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

7.3. Specific end use(s)
If you require advice on specific uses, please contact your supplier or check the Good Practice Guide referred to in section 16.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters
Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust). For the occupational exposure limits in your country, please consult a competent occupational hygienist or the local regulatory authority.

8.2. Exposure controls

a) Appropriate engineering controls
Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

b) Individual protection measures, such as personal protective equipment

| Eye / face protection | Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries. |
| Skin protection | No specific requirement. For hands, see below. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. |
| Hand protection | Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session. |
| Respiratory protection | In case of prolonged exposure to airborne dust, wear a respiratory protective equipment that complies with the requirements of European or national legislation. |

b) Environmental exposure controls
Avoid wind dispersal.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appearance | Powder |
| Odour | Odourless |
| Odour threshold | Not relevant |
| pH (100 g/l in water at 20 ºC) | 5 – 8 |
| Melting point / freezing point | Not available |
| Initial boiling point and boiling range | Not relevant |
| Flash point | Not relevant |
| Evaporation rate | Not relevant |
9.2. Other information
No other information.

10. STABILITY AND REACTIVITY

10.1. Reactivity
Inert, not reactive.

10.2. Chemical stability
Chemically stable.

10.3. Possibility of hazardous reactions
No hazardous reactions.

10.4. Conditions to avoid
Not relevant.

10.5. Incompatible materials
No particular incompatibility.

10.6. Hazardous decomposition products
Not relevant.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin corrosion / irritation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Serious eye damage / irritation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>STOT – single exposure</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>STOT – repeated exposure</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

12.1. Toxicity
Not relevant.

12.2. Persistence and degradability
Not relevant.

12.3. Bioaccumulative potential
Not relevant.

12.4. Mobility in soil
Negligible.

12.5. Results of PBT and vPvB assessment
Not relevant.

12.6. Other adverse effects
No specific adverse effects known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

   a) Waste from residues / unused products
   Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

   b) Packaging
   Dust formation from residues in packaging should be avoided and suitable worker protection assured.
   Store used packaging in enclosed receptacles.
   Recycling and disposal of packaging should be carried out in compliance with local regulations.
   The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorised waste management company.

14. TRANSPORT INFORMATION

14.1. UN number
Not relevant.

14.2. UN proper shipping name
Not relevant.

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td></td>
<td>Not classified.</td>
</tr>
<tr>
<td>IMDG</td>
<td></td>
<td>Not classified.</td>
</tr>
<tr>
<td>ICAO / IATA</td>
<td></td>
<td>Not classified.</td>
</tr>
<tr>
<td>RID</td>
<td></td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

14.4. Packing group
Not relevant.
14.5. Environmental hazards
Not relevant.

14.6. Special precautions for user
No special precautions.

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

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture
Not relevant.

15.2. Chemical safety assessment
Exempted from REACh Registration in accordance with Annex V.7.

16. OTHER INFORMATION

Indication of the changes made to the previous version of the SDS
Amendment of § 1.1 and of § 1.3.

IARC and SCOEL publications
In 1997, the International Agency for Research on Cancer (IARC) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France)
In June 2003, the European Commission’s Scientific Committee for Occupational Exposure Limits (SCOEL) concluded:
“that the main effect in humans of the inhalation of respirable crystalline silica is silicosis. There is sufficient information to conclude that the relative lung cancer risk is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk.”
(SCOEL SUM Doc 94-final on respirable crystalline silica, June 2003)
So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.

Social Dialogue on Respirable Crystalline Silica
A multi-sectoral “Agreement on Workers’ Health Protection Through the Good Handling and Use of Crystalline Silica and Products containing it” was signed on 25 April 2006. This autonomous agreement, which received the European Commission’s financial support, is based on a Good Practice Guide. The requirements of the agreement came into force on 25 October 2006. The agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the agreement and its annexes, including the Good Practice Guide, are available from http://www.nepsi.eu and provide useful information and guidance for the handling of products containing respirable crystalline silica.
Third party materials
Insofar as materials not manufactured or supplied by IMERYS REFRACTORY MINERALS CLÉRAC are used in conjunction with, or instead of, IMERYS REFRACTORY MINERALS CLÉRAC materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of IMERYS REFRACTORY MINERALS CLÉRAC’s product in conjunction with materials from another supplier.

Training
Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

Liability
Such information is to the best of IMERYS REFRACTORY MINERALS CLÉRAC’s knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user’s responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.