

Safety Data Sheet

In compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010

Version: 7

Revision date: 16 November 2011

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Talc

REACH Registr. No.: Exempted in accordance with Annex V.7.

Synonyms: Steatite, soapstone

Trade names:

| | | |
|-------------------|------------------|-------------------|
| CERAMFLUX | LUZENAC 1445 | MISTRON® 85-6 GRF |
| FLUXITE® | LUZENAC 2 | MISTRON® 89-5F |
| INVELOP | LUZENAC 20M0 | STEABRIGHT® |
| JETFINE® 8CF | LUZENAC 20M00S | STEALIM® |
| LITHOCOAT® T2F | LUZENAC 20M2 | STEAMAS |
| LITHOCOAT® T3F | LUZENAC 2C BRUT | STEAMAT® |
| LUZENAC 0 | LUZENAC 8218 | STEAMIC® 00S F |
| LUZENAC 00 | LUZENAC G20 F | STEAMIC® 00S CF |
| LUZENAC 00C | LUZENAC HAR® T84 | STEAMIC® T1 CF |
| LUZENAC 00S | LUZENAC MB25 | STEAPLUS® HAR T77 |
| LUZENAC 00S CERAM | LUZENAC OXO | STEAPLUS® HAR T84 |
| LUZENAC 10M0 | LUZENAC PR7841 | STEOPAC® |
| LUZENAC 10M00S | LUZENAC ST 115 | STEOPAC® CF |
| LUZENAC 10M2 | MISTRON® 85-6F | |

1.2 Relevant identified uses of the substance or mixture and uses advised against

Functional mineral for use in paper, paints, ceramics, plastics, personal care, etc.

1.3 Details of the supplier of the safety data sheet

- Company name: Imerys Talc Luzenac France
- Address: Route Nationale 20
B.P. 11
09250 Luzenac-sur-Ariège
France
- Phone No.: +33 5 61 02 04 06
- Fax No.: +33 5 61 02 04 40
- E-mail of person responsible for SDS: msds.talceurope@imerys.com

1.4 Emergency telephone number

Emergency phone number: +1 303 623 5716

Available outside office hours: Yes

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SECTION 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

This product does not meet the criteria defined in the Regulation EC 1272/2008 and in the Directive 67/548/EC. This product should be handled with care to avoid dust generation.

Classification EU (67/548/EC): No classification

Regulation EC 1272/2008: No classification

2.2 Label elements

Label elements according to Regulation (EC) No 1272/2008

- Pictogram None
- Signal word None
- Hazard statement None
- Precautionary statements 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.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Main constituents:

The above mentioned products are a natural association of talc, chlorite and dolomite.

| Main constituents | EINECS | CAS | Amount (%) |
|-------------------|-----------|------------|------------|
| Talc | 238-877-9 | 14807-96-6 | } > 95 |
| Chlorite | 215-285-9 | 1318-59-8 | |
| Dolomite | 240-440-2 | 16389-88-1 | < 5 |

These products contain less than 1% respirable crystalline silica (RCS) and do not meet the classification criteria.

Impurities: These products do not contain any classified impurity

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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

Skin contact: No special first aid measures necessary.

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Inhalation: No special first aid measures. Remove to fresh air and get medical attention in case of serious respiratory problems.

Ingestion: No first aid measures required.

4.2 Most important symptoms and effects both acute and delayed:

Symptoms of acute accidental exposure would be non-specific and similar to those of a massive inhalation of any dust without toxic effects. These symptoms may include coughing, expectoration, sneezing, and difficulty in breathing due to upper respiratory tract irritation.

4.3 Indication of immediate medical attention and special treatment needed:

No specific actions are required.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media:

All extinguishing media can be used.

5.2 Special hazards arising from the substance or mixture:

The product is not flammable, combustible or explosive. No hazardous thermal decomposition.

5.3 Advice for firefighters:

No specific firefighting protection is required. Use an extinguishing agent suitable for the surrounding fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid airborne dust generation. If the generation of dust is likely, personal protective equipment should be worn in compliance with national legislation.

6.2 Environmental precautions:

No special requirements. Contain spillage and clean up as indicated below.

6.3 Methods and material for containment and cleaning up:

Dry product should be cleaned with a shovel or vacuum cleaner while wearing personal protective equipment in compliance with national legislation. Washing the floor with water is not recommended since it may cause the floor to become slippery. However, if talc is already wet, and only in this case, the floor should be thoroughly flushed with water to remove slipperiness.

6.4 Reference for other sections:

See sections 8 and 13

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SECTION 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.

7.2 Conditions for safe storage, including any incompatibilities:

Technical measures/ Precautions:

Keep the product dry and in closed containers.

7.3 Specific end use(s): If you require advice on specific uses, please contact your supplier.

SECTION 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 and respirable crystalline silica dust. The OEL (Occupational Exposure Limit) for talc measured as an 8 hour TWA (Time Weighted Average) for several European countries is included in Annex 1. For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.

8.2 Exposure controls

8.2.1 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, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, such as isolating personnel from dusty areas. Remove and wash soiled clothing.

8.2.2 Individual protection measures, such as personal protective equipment:

(a) Eye protection:

Wear safety glasses with side-shields where there is a risk of dust generation which could lead to mechanical irritation of the eye.

(b) Skin protection:

No specific requirement. For hands, see below.

Hand protection:

Protective gloves are not necessary but recommended for those prone to skin irritation or dryness.

(c) Respiratory protection:

In case of prolonged overexposure to airborne dust concentrations, wear respiratory protective equipment that complies with the requirements of national legislation.

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8.2.3 Environmental exposure controls

Avoid wind dispersal.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- (a) **Appearance:** White, off white to light grey powder
- (b) **Odour:** Odourless
- (c) **Odour threshold:** Not relevant
- (d) **pH:** 9-9.5 (suspension of 10% talc in water)
- (e) **Melting point:** >1300°C
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not explosive. Limits do not apply
- (m) **Relative density:** 2.58-2.83
- (n) **Solubility (ies):**
 - Solubility in water:** Negligible
 - Solubility in hydrofluoric acid:** Yes
- (p) **Auto-ignition temperature:** Not relevant
- (q) **Decomposition temperature:** >1000°C
- (s) **Explosive properties:** Not explosive
- (t) **Oxidising properties:** Non oxidizing

9.2 **Other information:** No other information

SECTION 10. STABILITY AND REACTIVITY

- 10.1 **Reactivity:** Inert, not reactive
- 10.2 **Chemical stability:** Chemically stable
- 10.3 **Possibility of hazardous reactions:** No hazardous reaction
- 10.4 **Conditions to avoid:** None
- 10.5 **Incompatible materials:** None known
- 10.6 **Hazardous decomposition products:** None

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SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on the likely route of exposure: Inhalation is the primary route of exposure. Repeated and prolonged exposure to large amounts of talc dust might induce a mild pneumoconiosis. This is caused by lung overload exposure, a non specific particle effect, rather than a specific intrinsic fibrogenic activity of talc.

- (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) **Serious eye damage/irritation:** Based on available data, the classification criteria are not met
- (d) **Respiratory or skin sensitisation:** 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) **Reproductive toxicity:** No data are available on this product
- (h) **STOT – single exposure:** Based on available data, the classification criteria are not met
- (i) **STOT – repeated exposure:** Based on available data, the classification criteria are not met
- (j) **Aspiration hazard:** Based on available data, the classification criteria are not met

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity: No data are available on this product. No specific adverse effects known

12.2 Persistence and degradability: No data are available on this product. Product is an inorganic substance and therefore is not considered biodegradable

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

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SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residue/unused products

Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

13.2 Packaging

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

SECTION 14. TRANSPORT INFORMATION

14.1 UN number: Not relevant

14.2 UN proper shipping name: Not relevant

14.3 Transport hazard class(es):

ADR: not classified

IMDG: not classified

ICAO/IATA: not classified

RID: not classified

DOT: not classified

14.4 Packaging group: Not applicable

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

SECTION 15. REGULATORY INFORMATION

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

International legislation/requirements:

Industrial Safety and Health Law: This product does not contain harmful or controlled hazardous substances under ISHL. Contains <1% silica.

Toxic Chemical Control Act: This product does not contain chemical substances regulated as toxic, observational, restricted or banned under TCCA.

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Dangerous Substance Management Law: This product does not contain chemical substances regulated under DSML.

Waste Management Law: Ensure product is disposed of in accordance with the waste treatment standards prescribed in Waste Management Law.

Other regulations based on domestic or foreign laws: The following inventories have been investigated as to the publicly available portion of the lists:

| MINERAL | CAS No. | EINECS (EU) | AICS (Australia) | CEPA (DSL/NDSL) (Canada) | KECI (Korea) | ENCS/ISHL (Japan) |
|----------|------------|-------------|------------------|--------------------------|--------------|-------------------|
| Talc | 14807-96-6 | 238-877-9 | Yes | Yes (DSL) | Yes | Yes |
| Chlorite | 1318-59-8 | 215-285-9 | No* | No* (DSL) | Yes | No* |
| Dolomite | 16389-88-1 | 240-440-2 | Yes | Yes (NDSL) | Yes | No* |

| MINERAL | IECSC (China) | PICCS (Philippines) | TSCA (USA) | Swiss ID No. (Switzerland) | NZIoC (New Zealand) |
|----------|---------------|---------------------|------------|----------------------------|---------------------|
| Talc | Yes | Yes | Yes | Yes | Yes |
| Chlorite | Yes | Yes | No* | Yes | Yes |
| Dolomite | Yes | Yes | Yes | Yes | Yes |

No*: There exists a broad category for naturally occurring chemicals, so these minerals are covered by definition, but not specifically listed.

15.2 Chemical safety assessment

Exempted from REACH registration in accordance with Annex V.7

SECTION 16. OTHER INFORMATION

Indication of the changes made to the previous version of the SDS

Date of previous issue: 21 October 2011

Revision details:

Section 15: Inventories update

Section 16: References and sources update

References and sources:

1. Baan, R, Straif K, Secretan B, Ghissassi FE and Coglianò V. (2006), On behalf of the WHO International Agency for Research on cancer Monograph Working Group. Carcinogenicity of carbon black, titanium dioxide and talc. The Lancet Oncology. 7:295-296.
2. Wild, P.; "Lung cancer risk and talc not containing asbestiform fibers: a review of the epidemiological evidence". Occup. Environ. Med. 2006; 63, 4-9.

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3. Cohrssen, B. and Powell C.H. (2001). Talc. In Patty's Toxicology, 5th ed., Bingham, E., Cohrssen, B., and Powell, C.H., eds., John Wiley & Sons, Inc. NY. pp. 519-538.
4. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 93 (2010) Carbon Black, Titanium Dioxide, and Talc.
5. Wild, P. and coll; „Effects of talc dust on respiratory health: results of a longitudinal survey of 378 French and Austrian talc workers“, Occup. Environ. Med. 2008; 65, 261-267.
6. USEPA 1992. Health Assessment Document for Talc, Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA 600/8-91/217, March 1992.
7. P. Leophonte and coll. "La pathologie respiratoire chronique des travailleurs du talc", Rev. Fr. Mal. Resp., 1980, 8, 43-45
8. S. Endo-Capron and coll. "In vitro response of rat pleural mesothelial cells to talc samples in genotoxicity assays (sister chromatid exchanges and DNA repair)" Toxic in vitro, 1993, 7, 7-14.
9. P. Wild, M. Refregier, G. Auburtin, B. Carton, JJ. Moulin "Survey of the respiratory health of the workers of a talc producing factory", Occup. Environ. Med. 1995, 52, 470-477.
10. P. Wild and coll. "A cohort mortality and nested case-control study of French and Austrian talc workers" Occup. Environ. Med 2002, 59, 98-105.
11. M. Coggiola and coll. "An Update of a Mortality Study of Talc Miners and Millers in Italy", Am. J Indust. Med. 2003, 44, 63-69

Notice to reader

This material safety data sheet complements the technical data sheets but does not replace them. The information it contains is based on our present knowledge of the product on the date indicated. It is given in good faith. Users should be warned about the risks associated with using the product for a different purpose than that for which it was developed, and particularly for uses for which we are not qualified to give advice.

These regulatory prescriptions are provided with a view to helping users meet their obligations when using this product. This list should not be considered exhaustive and does not exempt users from ensuring that they are not required to comply with any further prescriptions other than those mentioned above concerning product possession and handling for which they are solely responsible.

Only the original English version is authoritative.

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Annex 1

Occupational Exposure Limits in mg/m³ 8 hours TWA Respirable dust – in EU 27¹ + Norway & Switzerland

| Country/Authority (see caption p. 2) | Non specified (inert) dust | Quartz | Talc |
|---|-------------------------------|--------------------|------|
| Austria/I | 6 | 0,15 | 5 |
| Belgium/II | 3 | 0,1 | 2 |
| Bulgaria/III | 4 | 0,07 | 3 |
| Czech Republic/IV | | 0,1 | 2 |
| Cyprus/V | / | 10k/Q ² | / |
| Denmark/VI | 5 | 0,1 | |
| Estonia | | 0,1 | |
| Finland/VII | / | 0,2 | 5 |
| France/VIII | | 5 or 25k/Q | |
| France/IX | 5 | 0,1 | |
| Germany/X | 3 | / ³ | 2 |
| Greece/XI | 5 | 0,1 | 2 |
| Hungary | | 0,15 | 2 |
| Ireland/XII | 4 | 0.05 | 0,8 |
| Italy/XIII | 3 | 0,025 | 2 |
| Lithuania/XIV | 10 | 0,1 | 1 |
| Luxembourg/XV | 6 | 0,15 | 2 |
| Malta ⁴ / XVI | / | / | |
| Netherlands/ XVII | 5 | 0,075 | 0,25 |
| Norway/ XVIII | 5 | 0,1 | 2 |
| Poland | | 0,3 | 1 |
| Portugal/ XIX | 5 | 0,025 | 2 |
| Romania/ XX | 10 | 0,1 | 2 |
| Slovakia | | 0,1 | 2 |
| Slovenia | | 0,15 | 2 |
| Spain/XXI | 3 | 0,1 | 2 |
| Sweden/XXII | 5 | 0,1 | 1 |
| Switzerland/XXIII | 6 | 0,15 | 2 |
| UK/XXIV | 4 | 0,1 | 1 |

¹ Missing information for Latvia – To be completed.

² Q : quartz percentage – K=1

³ Germany has no more OEL for quartz, cristobalite and tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.

⁴ When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

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Caption

| Country | | Adopted by/Law denomination | OEL Name (if specific) |
|----------------|-------|--|--|
| Austria | I | Bundesministerium für Arbeit und Soziales | Maximale ArbeitsplatzKonzentration (MAK) |
| Belgium | II | Ministère de l'Emploi et du Travail | |
| Bulgaria | III | Ministry of Labour and Social Policy and Ministry of Health. Ordinance n°13 of 30/12/2003 | Limit Values |
| Cyprus | IV | Department of Labour Inspection. Control of factory atmosphere and dangerous substances in factories, Regulations of 1981. | |
| Czech Republic | V | Governmental Directive n°441/2004 | |
| Denmark | VI | Direktoratet for Arbejdstilsynet | Threshold Limit Value (TLV) |
| Finland | VII | National Board of Labour Protection | Occupational Exposure Standard |
| France | VIII | Ministère de l'Industrie (RGIE) | Empoussiérage de référence |
| | IX | Ministère du Travail | Valeur limite de Moyenne d'Exposition |
| Germany | X | Bundesministerium für Arbeit | Maximale ArbeitsplatzKonzentration (MAK) |
| Greece | XI | Legislation for mining activities | |
| Ireland | XII | 2002 Code of Practice for the Safety, Health & Welfare at Work (CoP) | |
| Italy | XIII | Associazione Italiana Degli Igienisti Industriali | Threshold Limit Values (based on ACGIH TLVs) |
| Lithuania | XIV | Dėl Lietuvos higienos normos HN 23:2001 | Ilgalaikio poveikio ribinė vertė (IPRV) |
| Luxembourg | XV | Bundesministerium für Arbeit | Maximale ArbeitsplatzKonzentration (MAK) |
| Malta | XVI | OHS – LN120 of 2003, | OELVs |
| Netherlands | XVII | Ministerie van Sociale Zaken en Werkgelegenheid | Publieke grenswaarden |
| Norway | XVIII | Direktoratet for Arbejdstilsynet | Administrative Normer (8hTWA) for Forurensing i Arbeidsmiljøet |
| Portugal | XIX | Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2007 | Valores Limite de Exposição (VLE) |
| Romania | XX | Government Decision n° 355/2007 regarding workers' health surveillance. Government Decision n° 1093/2006 regarding carcinogenic agents (in Annex 3: Quartz, Cristobalite, Tridymite). | OEL |
| Spain | XXI | Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007 | Valores Limites |
| Sweden | XXII | National Board of Occupational Safety and Health | Yrkeshygieniska Gränsvärden |
| Switzerland | XXIII | | Valeur limite de Moyenne d'Exposition |
| United Kingdom | XXIV | Health & Safety Executive | Workplace Exposure Limits (WEL) |

Source : IMA-Europe. Date : May 2010, updated version available at

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