Information Sheet

Compliant with the safety data sheet format defined by Ann. II of the REACH Reg., but not required by Art. 31

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

1.1. Product identifier

Code: **1451005001**
Product name **GRIGOASPHALT**

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

Intended use **Cold bituminous conglomerate**

Identified Uses	Industrial	Professional	Consumer
BUILDING	**-**	**SU: 19.**	**SU: 19.**

Ready-to-use product for repairing road surfaces.
Product for artisanal and private use.
Any other use is not recommended.

1.3. Details of the supplier of the Information Sheet

Name **FORNACI CALCE GRIGOLIN S.p. A.**
Full address **Via Foscarini, 2**
District and Country **31040 Nervesa della Battaglia (TV)**
Italy
Tel. +39 0422 5261
Fax +39 0422 526299
e-mail address of the competent person responsible for the information sheet **info@fornacigrigolin.it**

1.4. Emergency telephone number

For urgent inquiries refer to **UNITED KINGDOM – NHS 111/NHS 24**
Tel. 111

MALTA - Malta National Poisons Centre
Tel. 1774 every day, from 8:00 a.m. to 8:00 p.m.
Tel. +356 2559 4600 (abroad)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: --

2.2. Label elements

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements:
P501 Dispose of contents / container in conformity to the national regulation.
P273 Avoid release to the environment.

SECTION 2. Hazards identification ... / >>

Product not intended for uses provided for by Directive 2004/42/EC.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Mixture consisting of sand, grit, calcareous fillers and bituminous binder.
The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

Rescuer protection

Information not available

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

Information not available

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

Information not available

Means to have available in the workplace for specific and immediate treatment

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material information sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage Class (Switzerland): 13 - Non-combustible solids

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Asphalt (bitumen) (8052-42-4)
Belgium Limit value (mg/m³) 5 mg/m³
Denmark Grænseværdi (langvarig) (mg/m³) 1 mg/m³
Denmark Grænseværdi (kortvarig) (mg/m³) 2 mg/m³
Ireland OEL (8 hours ref) (mg/m³) 0.5 mg/m³
Ireland OEL (15 min ref) (mg/m3) 10 mg/m³
Poland NDS (mg/m³) 5 mg/m³
Poland NDSCh (mg/m³) 10 mg/m³
Spain VLA-ED (mg/m³) 0.5 mg/m³
United Kingdom WEL TWA (mg/m³) 5 mg/m³
United Kingdom WEL STEL (mg/m³) 10 mg/m³
Switzerland MAK (mg/m³) 10 mg/m³
Australia TWA (mg/m³) 5
Canada (Quebec) VECD (mg/m³) 5 mg/m³
USA - ACGIH ACGIH TLV®-TWA (mg/m³) 0.5 mg/m³
USA - NIOSH NIOSH REL (STEL) (mg/m³) 5 mg/m³

SECTION 8. Exposure controls/personal protection ... / >>

Asphalt (bitumen) (CAS 8052-42-4)
DNEL / DMEL (Workers) Long term - local effects, inhalation 2.9 mg/m³ (DNEL, 8h) (Asphalt fumes [bitumen])
DNEL / DMEL (general population) Long term - local effects, inhalation 0.6 mg/m³ (DNEL, 24h) (Asphalt fumes [bitumen])
PNEC (additional indications) Additional indications Not applicable. The substance is a UVCB complex

Control (monitoring) methods:
Monitoring procedures must be selected on the basis of the indications established by the competent local authorities or national work contracts. Refer to Legislative Decree 81/2008 and good industrial hygiene practices.

Exposure limit values:
Hydrogen sulfide - IOELV: TWA - 5 ppm, 7 mg/m3; STEL - 10 ppm, 14 mg/m3

Note:
The derived no-effect level (DNEL) is a safe level of exposure derived from toxicological data in accordance with specific indications contained in the European REACH regulation. The DNEL may differ from an occupational exposure limit value (OEL) for the same chemical. OELs may be recommended by an individual company, a state regulatory body, or an expert organization such as the Scientific Committee on Occupational Exposure Limit Values (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered safe exposure levels for a typical worker in an 8-hour shift, 40-hour work week environment, as a time-weighted average (TWA) concentration or as a short-term (15 minute) exposure limit (STEL). Although they are also considered health protection indicators, OELs are derived using a different process than REACH.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
HAND PROTECTION
If contact with the product is expected, it is recommended to protect your hands with work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, permeability time.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
SKIN PROTECTION
Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Use tightly fitting safety glasses. In addition to goggles, use a face shield if there is a risk of splashing on the face.
The equipment must comply with the European standard EN 166.
RESPIRATORY PROTECTION
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Technical control measures:
Minimize exposure to mists/vapours/aerosols. When handling hot product in confined spaces, ensure effective ventilation. Before accessing the storage tanks and starting any type of intervention in a confined space, carry out adequate reclamation, check the atmosphere and check the oxygen content, the degree of flammability and the presence of sulfur compounds.

Hand protection:
In case of possibility of contact with the skin, use gloves resistant to hydrocarbons, lined internally. Presumably suitable materials: nitrile (NBR) or PVC with a protection index of at least 5 (permeation time ≥240 min). If contact with the hot product is possible or foreseeable, the gloves must be heat resistant and thermally insulated. Use gloves in compliance with the conditions and limits set by the manufacturer. Replace gloves immediately if they show cuts, holes or other signs of deterioration. If necessary, refer to the UNI EN 374 standard.

Skin and body protection:
Wear protective clothing during operations involving hot material: heat resistant clothing (with trousers over the boots and sleeves over the glove cuff), heavy heat resistant and non-slip boots (e.g. leather) (EN 943-13034-14605), resistant to chemicals. Protective helmet with neck cover. Replace and clean protective suits at the end of your work shift to avoid any product transfer to clothing or underwear.

Respiratory protection:

Regardless of other possible actions (adjustments to systems, operating procedures and other means to reduce worker exposure), the personal protective equipment that can be adopted as needed is indicated. In ventilated or outdoor environments: in the presence of fog and in case of handling the product in the absence of suitable fog containment systems, use masks or half-masks with a fog/aerosol filter. In case of significant presence of vapors (e.g. in case of high temperature handling), use masks or half-masks with filter for hydrocarbon vapors. (EN 136/140/145). In confined environments (e.g. inside tanks): the adoption of respiratory protection devices (half masks, masks, respiratory devices) must be evaluated based on the work activity and the foreseeable duration and intensity of exposure. For the characteristics, refer to the Ministerial Decree 02/05/2001. Combined filter device (DIN EN 141). If exposure levels cannot be determined or estimated with good certainty, or if oxygen deficiency is likely to occur, use only a self-contained breathing apparatus. In places where hydrogen sulfide can accumulate, use approved respiratory protective devices: full masks equipped with a type B filter cartridge (grey for organic vapors, including H2S), or self-contained breathing apparatus. (EN 136/140/145).

Thermal protection:
If contact with the hot product is possible or foreseeable, the gloves must be heat resistant and thermally insulated.

Environmental exposure controls:
Do not dispose of the product in the environment. Storage facilities/areas must be equipped with appropriate systems to prevent soil and water contamination in the event of leaks or spills. Do not distribute sludge generated by industrial water treatment on natural soils. Sludge generated from industrial water treatment must be incinerated, kept under containment or treated.

Limitation and control of consumer exposure:
Ensure adequate ventilation.

8.3. Hygiene measures
General protective and hygiene rules at work:
Avoid contact with skin and eyes. Avoid breathing vapors or mists. Do not dry your hands with dirty or greasy rags. Don't keep dirty rags in your pockets. Do not eat, drink or smoke with dirty hands. Wash with water and soap (possibly neutral); do not use irritating products or solvents that remove the sebaceous coating of the skin. Do not reuse clothing that is still contaminated.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value		Information
Appearance	pasty		
Colour	black		
Odour	characteristic		
Melting point / freezing point	not available		
Initial boiling point	not available		
Flammability	not available		
Lower explosive limit	not available		
Upper explosive limit	not available		
Flash point	not available		
Auto-ignition temperature	not available		
Decomposition temperature	not available		
pH	not available		
Kinematic viscosity	not available		
Solubility	insoluble		
Partition coefficient: n-octanol/water	not available		
Vapour pressure	not available		
Density and/or relative density	1,7	kg/l	
Relative vapour density	not available		
Particle characteristics	not applicable		

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

SECTION 9. Physical and chemical properties ... / >>

VOC (Directive 2010/75/EU)	10,00 %	-	170,00	g/litre
Explosive properties	not available			
Oxidising properties	not available			
Granulometry	0-6 mm			

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possible harmful effects on humans and possible symptoms:
Contains Polycyclic Aromatic Hydrocarbons (PAH). If inhaled it is suspected to cause cancer. Urinary biological markers related to PAH exposure may provide an indication of bitumen exposure. Irritations of the lungs and upper respiratory system with rhinitis, pharyngitis and pneumonia. According to the International Agency for Research on Cancer (IARC), certain specific uses of bitumen may result in the risk of carcinogenicity, as follows: (a) Occupational exposure to oxidized bitumen and its emissions in roofing operations are "probably carcinogenic to humans" (Group 2A), (b) occupational exposure to hard bitumens and their emissions in road paving operations are "possible carcinogenic to humans" (Group 2B) and (c) occupational exposures to "straight-run" bitumens and their emissions during road paving are "possible carcinogens to humans" (Group 2B). These risk levels identified by IARC are associated with specific uses that require heating.

Other information:
The product may release hydrogen sulphide: carry out a specific inhalation risk assessment
resulting from the presence of hydrogen sulphide in the free spaces of the tanks, in confined spaces, in
residues and in excess products and in all situations of unintentional release, to determine what the best means of control are based on local conditions. In case of effects from inhalation of H2S (hydrogen sulphide) or CO (carbon dioxide), adopt specific protocols. Carry out a specific assessment of inhalation risks deriving from the presence of sulfur dioxide (SO2) and/or hydrogen sulphide (H2S) in free spaces of tanks, in confined spaces, in product residues, in tank bottoms and wastewater and in all situations of unintentional release, to determine which control measures are best suited to local conditions.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

SECTION 11. Toxicological information ... / >>

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
Asphalt (bitumen) (CAS 8052-42-4)

Oral LD50 rat > 5000 mg/kg body weight [API (1982a/b) - OECD 401]
LD50 skin rabbit > 2000 mg/kg body weight [API (1982a/b) - OECD 402]
LC50 inhalation rat (Dust/Mist - mg/l/4h) > 94.4 mg/l/4h (OECD 403)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
Not irritating
API (1982a/b) (OECD 404) Rabbit
pH: Not applicable

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
Not irritating
API (1982a/b) (OECD 405) Rabbit
pH: Not applicable

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
API (1983 a/b) (OECD 406)
not sensitizing.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

Asphalt fumes [bitumen]
Not classified (Data conclusive but not sufficient for classification)
(OECD 474) (Fraunhofer Institute, 2009) (OECD 471 - Ames test) (De Meo et al, 1996)
This data is valid for all components of the product.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
(OECD 451)
(OECD 453)
This data is valid for all components of the product

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

SECTION 11. Toxicological information ... / >>

Asphalt fumes [bitumen]
Not classified (Data conclusive but not sufficient for classification)
API 1983a/b (OECD 422)
Condensed by bitumen fume (Fraunhofer Institute, 2009)
This data is valid for all components of the product

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Asphalt fumes [bitumen]
Not classified (Data conclusive but not sufficient for classification)
Result of epidemiological study.
Condensed by bitumen fume These data are valid for all components of the product

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Specific target organ toxicity (STOT) — repeated exposure:
Asphalt [bitumen]
Not classified (Data conclusive but not sufficient for classification)
Asphalt (bitumen) (CAS 8052-42-4)

LOAEC (inhalation, rat, dust/mist/fume, 90 days) 106.6 mg/litre/6h/day (OECD 413)
NOAEL (dermal, rat/rabbit, 90 days) 200 mg/kg body weight/day (API, 1983 c/d)
NOAEC (inhalation, rat, dust/mist/fume, 90 days) 20.1 mg/l air (OECD 413)
NOAEC, chronic, rat, local 10.4 mg/m³ (104 weeks, (OECD 451))

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Not classified (Data conclusive but not sufficient for classification)
Solid
Asphalt (bitumen) (CAS 8052-42-4)
Viscosity, kinematic 1000 - 16000 mm²/s (60°C - EN 12595) (CONCAWE, 2010a; CONCAWE, 1992a)

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Ecology - general:
The product is not considered dangerous for aquatic organisms and does not cause long-term unwanted effects on the environment. Dispersion into the environment can however lead to contamination of environmental matrices (air, soil, subsoil, surface and groundwater). Use according to good working practice, avoiding dispersing the product into the environment.
Ecology - air:
The product has a low vapor pressure. Exposure is possible only in particular cases (use at high temperatures, or for operations that cause splashes or mists).
Ecology - water:
Dispersible in water. It will not undergo hydrolysis.

Asphalt (bitumen) (CAS 8052-42-4)
LC50 fish 1 1000 mg/l [Oncorhynchus mykiss - Redman, et al. (2010b)]
EC50 72h algae 1 > 1000 mg/l (Pseudokirchnerella subcapitata - Redman, et al. (2010b)
NOEC (chronic) 1000 mg/l (NOEL / 28 d) (QSAR, Oncorhynchus mykiss, Redman et al, 2010)

SECTION 12. Ecological information ... / >>

12.2. Persistence and degradability

Asphalt (bitumen) (CAS 8052-42-4) The substance is a UVCB complex. The test methods for this endpoint are not applicable to UVCB substances. The main constituents of the product are to be considered "inherently" biodegradable, but not "readily" biodegradable: therefore they can be moderately persistent, particularly in anaerobic conditions.

12.3. Bioaccumulative potential

Asphalt (bitumen) (CAS 8052-42-4) The test methods for this endpoint are not applicable to UVCB substances.

12.4. Mobility in soil

Asphalt (bitumen) (CAS 8052-42-4) The test methods for this endpoint are not applicable to UVCB substances.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
Asphalt (bitumen) (CAS 8052-42-4) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII. PBT-vPvB assessment: from an environmental point of view, the product must be considered as "persistent", according to the criteria of reg. REACH Annex XIII (point 1.1)

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations.
See section 8 for possible need for PPE.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

SECTION 14. Transport information ... / >>

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
None

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Information not available

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Use descriptor system:
SU 19 Building and construction work

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule

SECTION 16. Other information ... / >>

- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
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15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707
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- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

SECTION 16. Other information ... / >>

This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
01 / 04 / 06 / 07 / 08 / 09 / 11 / 13 / 15 / 16.