

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

1.1. Product identifier

Substance name : **CLARCEL CBR / CBR3**
Chemical name : **Calcined diatomaceous earth**
Product form : Substance
EC-No. : 293-303-4
CAS-No. : 91053-39-3

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

Relevant identified uses

Use of the substance/mixture : Filtration additive for the agri-food industries, the chemical industry and the pharmaceutical industry.

Uses advised against

Restrictions on use : No data available.

1.3. Details of the supplier of the safety data sheet

CHEMVIRON France SAS
15 avenue Edouard Belin
92500 RUEIL-MALMAISON - FRANCE
T +33 (0)1 81 93 41 01 - F +33 (0)1 41 29 17 34
sds@calgoncarbon.com - <http://www.chemviron.eu>

1.4. Emergency telephone number

Emergency number : The emergency telephone number for France is the ORFILA (INRS) number: + 33 (0) 1 45 42 59 59. This number gives details of all the poison control centres in France. These poison control and toxicovigilance centres provide free medical care 24/7 (excluding the cost of the call). For the emergency telephone number for your own country, please contact the relevant local authorities and visit the ECHA (European Chemicals Agency) website: http://echa.europa.eu/help/nationalhelp_contact_en.asp

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Specific target organ toxicity — Repeated exposure, Category 2 H373

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Possibility of irreversible effects by repeated inhalation of high concentrations of alveolar dust (silicosis).

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) :

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
 P314 - Get medical advice/attention if you feel unwell.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
 P502 - Refer to manufacturer/supplier for information on recovery/recycling

2.3. Other hazards

Adverse physicochemical, human health and environmental effects :

: Possibility of irreversible effects by repeated inhalation of high concentrations of alveolar dust (silicosis).

Other hazards which do not result in classification :

: Possible effects on health
 Possible transient irritation of the eyes and respiratory tract (mechanical effect of dust).

Effects on the environment

This product does not present a specific risk to the environment.

Physico-chemical hazards

no particular risk of ignition or explosion.

SECTION 3: Composition/information on ingredients

3.1. Substances

Comments :

: Substance name: Calcined diatomaceous earth.

Name :

: CLARCEL CBR / CBR3

CAS-No. :

: 91053-39-3

EC-No. :

: 293-303-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcined kieselguhr (Main constituent, Contains the various forms of silica indicated below.)	(CAS-No.) 91053-39-3 (EC-No.) 293-303-4	~ 100	Not classified
Cristobalite (Impurity)	(CAS-No.) 14464-46-1 (EC-No.) 238-455-4	< 40	Not classified
Respirable Crystalline silica dust (<10 µm ; impurity)		< 10	STOT RE 1, H372
Quartz (SiO ₂) (Impurity)	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	< 10	Not classified

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a poison center or a doctor if you feel unwell.
- First-aid measures after inhalation : Remove the victim from the contaminated area and make him/her breathe fresh air. In the event of persistent disorders: Consult a doctor.
In case of significant* inhalation of dust: Move the person outside and maintain him/her in a position where he/she can breathe comfortably. If the person is fully conscious, make him/her rinse his/her throat with plenty of drinking water. Make the victim blow his/her nose. In the event of persistent disorders: Consult a doctor.
- First-aid measures after skin contact : Wash with soap and plenty of water. Seek medical advice if an irritation appears.
- First-aid measures after eye contact : Rinse carefully with plenty of water with the eyelids held wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : If the person is conscious, rinse mouth with water. If you feel unwell, seek medical advice.

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

- Symptoms/effects after inhalation : If large quantities of dust are inhaled, possible irritation of breathing passages with coughing.
- Symptoms/effects after eye contact : In the event of contact with the eyes: irritation, in particular in the event of prolonged contact.
- Chronic symptoms : Breathing dust containing crystalline silica over a long period of time may cause harmful pulmonary effects. Crystalline silica (cristobalite) dust is a proven cause of silicosis, a progressive and sometimes fatal lung disease.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Non-flammable product. Use appropriate means to fight fires in the vicinity.
- Unsuitable extinguishing media : No data available.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in the event of fire : The product is not combustible. In case of fire, the combustion of packaging materials could lead to the formation of carbon oxides and smoke.

5.3. Advice for firefighters

- Precautionary measures fire : Keep unprotected and unauthorised persons away from the danger area.
- Protection in the event of a fire : Do not enter the danger zone without suitable chemical protection clothing and self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Protective equipment : Use personal protective equipment. Avoid inhaling the dust.
- Measures in case of dust release : Avoid inhaling the dust. Ensure adequate ventilation. Avoid crushing the product, and the formation and dissemination of dust in the atmosphere.

For emergency responders

Protective equipment : Use personal protective equipment. Avoid inhaling the dust.

6.2. Environmental precautions

Avoid dispersion by draughts. Prevent the product entering the sewers.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect and remove without creating dust.
Keep in suitable closed containers and for disposal.
Avoid dispersion of the dust in the air (e.g.: by the removing the dust on surfaces with compressed air).

6.4. Reference to other sections

For information on handling, see section 7. For information on personal protective equipment, see section 8. For information on disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Provide anti-dust equipment or method of unloading and handling.

Precautions for safe handling : Do not eat, smoke or drink in the work area.
Avoid dust formation. Avoid the accumulation of dust in confined spaces.
Approved respiratory protective device and goggles recommended (see section 8).

Hygiene measures : Avoid inhaling the dust. Wash hands thoroughly after use.
Wash hands after handling.
Remove contaminated clothing and protection equipment before entering a place where food is served or consumed. Do not eat, drink or smoke when using this product. Maintain good industrial hygiene.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Avoid creation of a dust cloud and prevent dispersion by the wind.

Storage conditions : Keep the container tightly closed in a dry and well-ventilated area.

Incompatible materials : Hydrofluoric Acid.

Packaging materials : Aluminium for tanker trucks.
Paper bags.
Polypropylene big-bags.
Soluble bags in cellulose.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cristobalite (14464-46-1)		
EU	Local name	Silica crystalline (Cristobalite)
EU	Notes	(Year of adoption 2003)
EU	Regulatory reference	SCOEL Recommendations

Cristobalite (14464-46-1)		
France	Local name	Cristobalite (Silices cristallines)
France	VME (mg/m ³)	0.05 mg/m ³ (alveolar fraction)
France	Note (FR)	Valeurs réglementaires contraignantes
France	Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)
United Kingdom	WEL TWA (mg/m ³)	0.1 mg/m ³

Quartz (SiO₂) (14808-60-7)		
EU	Local name	Silica cristalline (Quartz)
EU	Notes	(Year of adoption 2003)
EU	Regulatory reference	SCOEL Recommendations
France	Local name	Quartz (Silices cristallines)
France	VME (mg/m ³)	0.1 mg/m ³ (alveolar fraction)
France	Note (FR)	Valeurs réglementaires contraignantes
France	Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)
Spain	VLA-ED (mg/m ³)	0.1 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0.1 mg/m ³

Respirable Crystalline silica dust		
EU	Obligatory regulatory values TLV (mg / m ³) 0.1 mg/m ³	
EU	Regulatory reference	(UE) 2017/2398
United Kingdom	WEL TWA (mg/m ³)	0.1 mg/m ³

Calcined diatomaceous earth (91053-39-3)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, inhalation	0.33 mg/m ³	
DNEL/DMEL (General population)		
Long-term - systemic effects, oral	18.7 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0.08 mg/m ³	
PNEC (STP)		
PNEC sewage treatment plant	100 mg/l	

8.2. Exposure controls

Appropriate engineering controls :

Do not breathe dust.

Hand protection : waterproof gloves.

Eye protection	: Goggles with lateral protection (according to standard EN 166).
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear respiratory protection. Dust/aerosol filter, type P3 (in accordance with standard EN 143).
Thermal hazard protection	: None.
Environmental exposure controls	: Avoid release to the environment.
Consumer exposure controls	: Wash hands after working with the product.
Other information	: Provide anti-dust handling techniques (and facilities).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: Pink.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 5 - 8 (10%)
Relative evaporation rate (butylacetate=1)	: Not applicable (mineral product)
Melting point	: > 1000 °C
Freezing point	: Not applicable (mineral product)
Boiling point	: Not applicable (mineral product)
Flash point	: Not applicable (mineral product)
Auto-ignition temperature	: Not applicable (mineral product)
Decomposition temperature	: Not applicable (mineral product)
Flammability (solid, gas)	: Non-flammable product
Explosive limits	: Not applicable (mineral product)
Vapour pressure	: Not applicable (mineral product)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 220 - 250 kg/m ³ according to the quality.

Solubility	: Negligible.
Log Pow	: Not applicable (mineral product)
Viscosity, kinematic	: Not applicable (mineral product)
Viscosity, dynamic	: Not applicable (mineral product)
Explosive properties	: Non-explosive.
Oxidising properties	: Not classified as an oxidant.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity relating to the substances, containers and contaminants to which the substance or mixture may be exposed during their transport, storage and use : No data available.

10.2. Chemical stability

The product is stable in normal conditions of use. Stability of the substance or mixture under normal and predictable storage and handling room conditions in terms of temperature and pressure : Chemically stable under standard room conditions (room temperature).

10.3. Possibility of hazardous reactions

No possibility of dangerous reactions because the product is inert.

10.4. Conditions to avoid

Avoid suspension of dust in the air. Store protected from moisture (to retain the technical properties of the product).

10.5. Incompatible materials

Families of substances or mixtures, or specific substances, such as water, air, acids, bases, or oxidising agents, with which the substance or the mixture could react and create a hazardous situation: Hydrofluoric acid.

10.6. Hazardous decomposition products

Known dangerous decomposition products and products which may be reasonably predictable as such following use, storage, pouring and heating : This product does not decompose under normal conditions. Decomposition products in case of fire : consult section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Acute toxicity	: Not classified

Calcined diatomaceous earth (91053-39-3)

LD50 oral rat	DL50 rat > 2.000 mg/kg (OECD Method Guideline 401) Results obtained on a similar product.
LC50 inhalation rat (mg/l)	CL50 rat > 2.6 mg/L (OECD method, Guideline 403) Results obtained on a similar product.

Skin corrosion/irritation : Not classified
Not irritating to the skin. Test on a human skin model.
pH: 5 - 8 (10%)

Serious eye damage/irritation : Not classified
Not irritating for the eyes - OECD Guideline 405
pH: 5 - 8 (10%)

Respiratory or skin sensitisation : Not classified
Inhalation - No reported effect
Results obtained on a similar product.
Contact with the skin - Not skin sensitising (OECD method, Guideline 429).
Results obtained on a similar product.

Germ cell mutagenicity : Not classified
By analogy with a comparable product - In Vitro - negative (OECD method, Guideline 471).

Carcinogenicity : Not classified

Respirable Crystalline silica dust

Additional information	Breathable crystalline silica fractions DFG MAK Committee (Germany) - Carcinogen - Category I, IARC: Group 1 - carcinogenic for humans. Respect of the exposure limits for the breathable fractions of crystalline silica can prevent silicosis and consequently lung cancer. Long-term exposure to breathable fractions of diatomaceous earth may result in irreversible effects on the lungs. Silicosis is its main effect before lung cancer.
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Reproductive toxicity : Not classified
No data available

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Possibility of irreversible effects by repeated inhalation of high concentrations of alveolar dust (silicosis).

Information on the likely routes of exposure :

Dermal contact : No data available.

Eyes contact : In the event of contact with the eyes: irritation, in particular in the event of prolonged contact.

Inhalation : Dust may cause respiratory irritation.

Ingestion : No data available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No damage to the environment is known or foreseeable in normal conditions of use.

Calcined diatomaceous earth (91053-39-3)	
LC50 Fish	No effect up to the limit of solubility.
EC50 Daphnia 1	No effect up to the limit of solubility.
EC50 72h algae (1)	No effect up to the limit of solubility.
NOEC (additional information)	Micro-organisms - NOEC, 3 h - > 1.000 mg/L (OECD method, Guideline 209)

12.2. Persistence and degradability

Calcined diatomaceous earth (91053-39-3)	
Persistence and degradability	Not applicable because inorganic substance.

12.3. Bioaccumulative potential

Calcined diatomaceous earth (91053-39-3)	
Log Pow	Not applicable (mineral product)
Bioaccumulative potential	Not applicable because inorganic substance.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Calcined diatomaceous earth (91053-39-3)	
Results of PBT assessment	Not applicable because inorganic substance.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : - Unused product (unchanged): landfill permitted.
- Soiled product: various disposal techniques depending on the nature of the cake.
In all cases: Destroy in accordance with local / national safety regulations In force.

Additional information : It is recommended to avoid or reduce waste production as much as possible.

The disposal of this product, solutions and by-products shall comply with the legal requirements for environmental protection and waste disposal and the requirements of all local authorities at all times.

A licensed waste disposal contractor will be in charge of the disposal of surplus and non-recyclable products. Do not evacuate untreated waste into the sewers.

Only dispose of this product and its container by taking all standard precautions. Handle non-cleaned and non-rinsed containers with care. Empty containers or liners may retain product residues. Avoid dispersing spilled materials, as well as their leakage, and any contact with the soil, waterways, drains and sewers.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Special transport precautions : For information on handling, see section 7. For information on personal protective equipment, see section 8. For information on disposal, see section 13.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

No REACH Annex XVII restrictions

CLARCEL CBR / CBR3 is not on the REACH Candidate List

CLARCEL CBR / CBR3 is not on the REACH Annex XIV List

Other information, restriction and prohibition regulations : Directive (EU) 2017/2398 of the European Parliament and of the Council of 12 December 2017 amending Directive 2004/37/EC on the protection of workers against the risks related to exposure to carcinogens or mutagens at work.

National regulations

Occupational diseases

RG 25 - Disorders consecutive to the inhalation of mineral dust containing crystalline silica (quartz, cristobalite, tridymite), crystalline silicates (kaolin, talc), or coal graphite. Social Security Code: articles L461-1 to 8; mandatory advance declaration of the employer table(s): 25

Hazardous Substances

Order of 20.04.1994 as last amended by the decree of 7 December 2009.

Classified Installations

Law no. 76-663 of 19.7.76 and Circular of 17.7.78

Waste

Law no. 75-633 of 15.7.75 - Technical instruction of 22.1.80 on industrial waste. Order of 02.02.1998, as amended by the decree of 29.5.2000 and by the order of 03.08.2001, relating to extraction and consumption of water, and to emissions of any kind from installations classified for the protection of the environment subject to authorisation.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Following major changes, the SAFETY DATA SHEET has been completely revised.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative
TLM	Median Tolerance Limit

Full text of H- and EUH-statements:

STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

This data is based on our current knowledge and describes the product in relation to health, safety and the environment only. It should therefore not be interpreted as guaranteeing any specific property of the product. This safety data sheet is consistent with international standard ISO 11014-1. In case of combinations or mixtures, make sure that no new danger could arise. The information in this data sheet is given in good faith and based on our current knowledge relating to the product concerned, at the date of edition. The attention of users is drawn to possible risks incurred when a product is used for other purposes than those for which it is intended. This sheet should only be used and reproduced for the purposes of prevention and safety. The enumeration of the legislative, regulatory and administrative texts cannot be regarded as exhaustive. It is the responsibility of the recipient of the product to refer to all the official texts concerning the use, possession and handling of the product for which he/she alone is responsible. The user of the product must also bring to the attention of people who may come into contact with the product (use, storage, cleaning containers or other operations) all the information necessary for work safety, and health and environmental protection by providing them with this safety data sheet.