
SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product Name	MANGALOX C
Product Code(s)	C 45
REACH registration number	Exempted in accordance with Annex V.7

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

Recommended Use	For use in: ceramics, Glass, frits, concrete, pigments, welding fluxes, casting fluxes.
Uses advised against	None in particular.

1.3 Details of the supplier of the safety data sheet

Legal entity	Production site	
Sibelco Europe Plantin & Moretuslei 1A B-2018 Antwerpen Tel.: +32 (0)3 2236611 sales.mineralsplus@sibelco.com	Sibelco Europe Geertruidenberg Centraleweg 52 NL-4931 NB Geertruidenberg Tel.: +31 (0)162 586500	Sibelco Europe Winterswijk Steengroeveweg 50 NL-7101 PH Winterswijk Tel.: +31 (0)543 561461

1.4 Emergency telephone number

Sibelco Europe
+32 3 223 6611 (during office hours)

SECTION 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 the Regulation EC 1272/2008.

Depending on the type of handling and use, airborne dust may be generated. Occupational exposure to dust should be monitored and controlled.

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

Regulation EC 1272/2008

No classification.

2.2 Label elements

None.

2.3 Other hazards

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical nature Substance containing a main component, UVCB.
Impurities Not applicable.

Chemical name	EC-No	CAS-No	Classification (1272/2008/EC)	Weight %	REACH registration number
Braunite, brown	305-405-9	94551-57-2	-	100	Exempted

For the full text of the H-Statements mentioned in this section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Advice No hazards which require special 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.

Ingestion No first aid measure required.

Inhalation Movement of the exposed individual from the area to fresh air is recommended.

4.2 Most important symptoms and effects, both acute and delayed

Main symptoms No acute and delayed symptoms and effects are observed.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No special first aid measures necessary.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media No specific extinguishing media is needed.

Unsuitable Extinguishing Media No restriction on the extinguishing media to be used.

5.2 Special hazards arising from the substance or mixture

Non combustible. No hazardous thermal decomposition.

5.3 Advice for firefighters

No specific fire-fighting protection is required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid airborne dust generation, wear respiratory personal protective equipment in compliance with national legislation, see EN 143: 2000.

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 (with high-efficiency particulate air filter) 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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. Other suitable controls may include enclosure, isolation, water suppression, 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.

Advices on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Shower and change clothes at end of work shift.

7.2 Conditions for safe storage, including any incompatibilities

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. Keep away from oxidising agents, strongly acid or alkaline materials and amines, Chlorates, Reducing agents, Hydrogen peroxide.

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

Exposure Limits

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust).

Chemical name	European Union	The United Kingdom	France	Germany	Netherlands
Braunite, brown		TWA: 0.5 mg/m ³	VME: 1 mg/m ³	AGW (AGS): 0.5 mg/m ³ inh TWA (DFG): 0.2 mg/m ³ inh TWA (DFG): 0.02 mg/m ³ resp Blut: 0.015 mg/m ³	WG: 0.05 mg/m ³ as Mn resp WG: 0.2 mg/m ³ as Mn inh Bloed: 0.015 mg/L
Chemical name	Italy	Spain	Portugal	Denmark	Poland
Braunite, brown		VLA-ED: 0.2 mg/m ³ as Mn	VLE-MP: 0.2 mg/m ³ as Mn	GV: 0.2 mg/m ³ as Mn	NDS: 0.3 mg/m ³ as Mn
Chemical name	Belgium	Finland	Norway	Hungary	Sweden
Braunite, brown	TWA: 0.2 mg/m ³ as Mn	HTP-arvot: 0.2 mg/m ³ as Mn inh HTP-arvot: 0.1 mg/m ³ as Mn resp	TWA: 1 mg/m ³ as Mn inh TWA: 0.1 mg/m ³ as Mn resp	ÁK: 5 mg/m ³ as Mn CK: 20 mg/m ³ as Mn	NGV: 0.2 mg/m ³ as Mn tot NGV: 0.1 mg/m ³ as Mn resp
Chemical name	Romania	Russia	Greece	Czech Republic	Slovakia
Braunite, brown			TWA: 5 mg/m ³ as Mn	TWA: 1 mg/m ³ as Mn CEIL: 2 mg/m ³ as Mn	NPEL: 0.5 mg/m ³

8.2 Exposure controls

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.

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 concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation. The use of half or full face masks with filters against particles of category 2 or 3 (FP2 - FP3) is recommended. See EN 143: 2000 - Respiratory protective devices. Particle filters.

Environmental exposure controls Avoid wind dispersal.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state @20°C	Solid
Appearance	Powder
Colour	Brown - Black
Odour	Odourless
pH	No information available
Melting/freezing point	>800 °C
Boiling point/boiling range	Not applicable (solid inorganic substance)
Flash point	Not applicable (not flammable)
Evaporation rate	Not applicable (solid inorganic substance)
Flammability (solid, gas)	Not flammable
Flammability Limits in Air	Not flammable
Explosion Limits	Not applicable (not flammable)
Vapour pressure	Not applicable (solid inorganic substance)
Vapour density	Not applicable (solid inorganic substance)
Relative density	No information available
Solubility	
Water solubility	Insoluble
Partition coefficient (n-octanol/water)	Not applicable (solid inorganic substance)
Autoignition temperature	Not applicable (not flammable)
Decomposition temperature	>2000 °C
Viscosity, dynamic	Not applicable (solid inorganic substance)
Explosive properties	Not applicable (not flammable)
Oxidising properties	Not oxidizing

9.2 Other information

Not applicable.

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 reactions.

10.4 Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials

Strong acids, Oxidizing agents, Reducing agents, Amines, Strong alkalis, Chlorates, Hydrogen peroxide.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapours: Manganese compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	
Ingestion	The acute oral LD50 of quartz is greater than 2000 mg/kg.
Skin Contact	The acute dermal LD50 of quartz is greater than 2000 mg/kg.
Inhalation	There is no specific acute toxicity data at doses that enable a categorical decision on the acute inhalation toxicity classification for any form of crystalline silica at 100%. Acute inhalation toxicity is not expected based on read across to an OECD compliant study, with a substance that contains 45% cristobalite and gives no indication of lethality. Hence further testing is not warranted in the interests of animal welfare.
Skin Corrosion/Irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive Toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration Hazard	Based on available data, the classification criteria are not met.

SECTION 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

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

12.6 Other adverse effects

No specific adverse effects known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products

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

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.

SECTION 14: TRANSPORT INFORMATION

According to ADR, RID, ADN, IMDG, IATA/ICAO .

14.1 UN number

Not regulated.

14.2 UN proper shipping name

Not regulated.

14.3 Transport hazard class(es)

Not regulated.

14.4 Packing group

Not regulated.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

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

National regulatory information No information available.

International legislation/requirements No information available.

15.2 Chemical safety assessment

Exempted from REACH Registration in accordance with Annex V.7.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

Not applicable.

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

Details of the Supplier of the Safety Data Sheet, Classification, Label elements, Composition, National Occupational Exposure Limits, Respiratory Protection, Remove 1999/45/EC and 67/548/EEC.

Third party materials

Insofar as materials not manufactured or supplied by Sibelco Europe are used in conjunction with, or instead of Sibelco Europe 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 Sibelco Europe's MANGALOX C in conjunction with materials from another supplier.

Training

Workers must be trained in the proper use and handling of this product as required under applicable regulations.

Prolonged and/or excessive exposure to respirable dust may cause mucous membrane and respiratory irritation and lung injury with symptoms of shortness of breath and reduced pulmonary function. Inhalation of dust may cause irritation of nose, throat and respiratory passages.

SDS No.

AP00124 / APNH

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

End of Safety Data Sheet