SAFETY DATA SHEET

MATERION

Version #: 08
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Registration number -
Synonyms None.
Materion Code 1ZZ

1.1. Product identifier

Name of the substance Silicon Dioxide (crystalline quartz), powder and pieces
Identification number 238-878-4 (EC number)

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

Identified uses Not available.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Electronic Materials
Address 6070 Parkland Blvd
Mayfield Heights, OH 44124
United States
Division
Telephone 1.216.383.4019
e-mail Materion-PS@materion.com
Contact person Product Stewardship Director

1.4. Emergency telephone number

Document number 1ZZ

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classificatior applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Carcinogenicity	Category 1A

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Silica
Hazard pictograms None.
Signal word None.
Hazard statements The substance does not meet the criteria for classification.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response

P308 + P313	If exposed or concerned: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information For further information, please contact the Product Stewardship Department at +1.216.383.4019.

2.3. Other hazards The Safety Information Sheet Chemicals of hazardous chemical can be obtained through phone, email or on the company website. This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII. The substance is not included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1. Substances

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Silica	1 - 99	14808-60-7 238-878-4	-	-	#
Classification: Carc. 1A;H350					

List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.
ATE: Acute toxicity estimate.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Union workplace exposure limit(s).
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Skin contact Remove and isolate contaminated clothing and shoes. For minor skin contact, avoid spreading material on unaffected skin.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing.

Ingestion If ingestion of a large amount does occur, call a poison control centre immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

4.2. Most important symptoms and effects, both acute and delayed Coughing. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear suitable protective equipment.

Special firefighting procedures Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up The product is immiscible with water and will spread on the water surface. Prevent entry intc waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. The product is insoluble in water.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store locked up. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended

Material	Type	Value	Form
Silicon dioxide	MAK	0,05 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	MAK	0,05 mg/m3	Respirable dust.

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Bulgaria. OEL values of carcinogens and mutagens at work (Reg. 10/2003 on prot. from carcinogens and mutagens at work, Ann. 1), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable fraction and dust

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction and dust

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Material	Type	Value
Silicon dioxide	MAC	0,1 mg/m3

Components	Type	Value
Silica (CAS 14808-60-7)	MAC	0,1 mg/m3

Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2

Material	Type	Value	Form
Silicon dioxide	TLV	0,3 mg/m3	Total
		0,1 mg/m3	Respirable.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TLV	0,3 mg/m3	Total
		0,1 mg/m3	Respirable.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Fine dust, respiratory fraction

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Fine dust, respiratory fraction

Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health

Material	Type	Value	Form
Silicon dioxide	TWA	0,05 mg/m3	Respirable.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable.

France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended

Material	Type	Value	Form
Silicon dioxide	VME	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable dust.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Material	Type	Value	Form
Silicon dioxide	VME	0,1 mg/m3	Respirable fraction.

Regulatory status: Regulatory binding (VRC)

Components	Type	Value	Form
Silica (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable fraction.

Regulatory status: Regulatory binding (VRC)

Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.

Ireland. OELVs, Schedules 1 & 2, Code of Practice for Chemical Agents and Carcinogens Regulations

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Italy. OELs (Legislative Decree n.81, 9 April 2008), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,025 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.

Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Lithuania. OELs. Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order No. V-824/A1-389), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Luxembourg. Chemical Substances Prohibited at Work (Annex III), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,075 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,075 mg/m3	Respirable dust.

Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended

Material	Type	Value	Form
Silicon dioxide	TLV	0,3 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TLV	0,3 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)

Material	Type	Value	Form
Silicon dioxide	TWA	0,025 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.

Slovakia. OELs for carcinogens and mutagens. Regulation No. 356/2006 on carcinogenic and mutagenic substances, as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Material	Type	Value	Form
Silicon dioxide	TWA	0,05 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable fraction.

Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable dust.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Material	Type	Value	Form
Silicon dioxide	TWA	0,15 mg/m3	Respirable fraction.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable fraction.

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable.

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable.

EU. OELs, Directive 2004/37/EC on carcinogen and mutagens from Annex III, Part A

Material	Type	Value	Form
Silicon dioxide	TWA	0,1 mg/m3	Respirable fraction and dust

Components	Type	Value	Form
Silica (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction and dust

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs)	Not available.
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

8.2. Exposure controls

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	If contact is likely, safety glasses with side shields are recommended.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Use personal protective equipment as required. Use of an impervious apron is recommended. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Wear protective gloves.
Respiratory protection	In case of inadequate ventilation, use respiratory protection.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Observe any medical surveillance requirements. Do not get in eyes. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Form	Solid.
Colour	Not available.
Odour	Not available.
Odour threshold	Not applicable.
Melting point/freezing point	Not applicable.
Boiling point or initial boiling point and boiling range	Not applicable.
Flammability	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not available.
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapour pressure	<0,0000001 kPa (25 °C (77 °F))
Density and/or relative density	
Relative density	Not applicable.

Vapour density	Not applicable.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes	No relevant additional information available.

9.2.2. Other safety characteristics

Evaporation rate	Not applicable.
Heat of combustion (NFPA 30B)	0 kJ/g
Molecular formula	O2Si
Molecular weight	60,08 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Powerful oxidizers. Chlorine.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects. No data on possible toxicity effects have been found.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Due to lack of data the classification is not possible.
Eye contact	Due to lack of data the classification is not possible.
Ingestion	Due to lack of data the classification is not possible.
Symptoms	Coughing.

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

Acute toxicity	Due to partial or complete lack of data the classification is not possible.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
Serious eye damage/eye irritation	Due to partial or complete lack of data the classification is not possible.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (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, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer 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, June 2003) Cancer hazard. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silica (CAS 14808-60-7)	1 Carcinogenic to humans.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.

11.2. Information on other hazards

Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to human health, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	Due to partial or complete lack of data the classification for hazardous to the aquatic environment, is not possible.
12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.
12.6. Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to the environment, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.
12.7. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class	Not assigned.
Subsidiary risk	-
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	Not assigned.

14.4. Packing group -

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

RID

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group -

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

ADN

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group -

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

IATA

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group -

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

IMDG

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group -

14.5. Environmental hazards

Marine pollutant No.

EmS Not assigned.

14.6. Special precautions for user Not assigned.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Silica (CAS 14808-60-7)

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended

Not listed.

Other regulations

The product does not need to be labelled in accordance with EC directives or respective nationa laws. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents.
According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended Use of this product by young persons under the age of 18 is not allowed in accordance with the Management of Health and Safety at Work Regulations 1999 [SI 1999/3242], as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

Silica (CAS 14808-60-7)	Affections consécutives à l'inhalation de poussières minérales renfermant de la silicecristalline (quartz, cristobalite, tridymite), des silicates cristallins (kaolin, talc), du graphite ou de la houille 25

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.

	MAC: Maximum Allowed Concentration. MARPOL: International Convention for the Prevention of Pollution from Ships. PBT: Persistent, bioaccumulative and toxic. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail. STEL: Short term exposure limit. TLV: Threshold Limit Value. TWA: Time Weighted Average. VLE: Exposure Limit Value. VME: Exposure Average Value. vPvB: Very persistent and very bioaccumulative.
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents
Information on evaluation method leading to the classification of mixture	Not applicable.
Full text of any statements, which are not written out in full under sections 2 to 15	H350 May cause cancer.
Revision information	SECTION 2: Hazards identification: Hazard statements SECTION 2: Hazards identification: Supplemental label information SECTION 8: Exposure controls/personal protection: Respiratory protection
Training information	Follow training instructions when handling this material.
Further information	Transportation Emergency Call Chemtrec at: US: 800.424.9300 International: 703.741.5970 Spain: 900.868.538 Switzerland: 0800.564.402 Chemtrec's toll free, mobile-enabled number in Germany – 0800 1817059 South Korea Toll-free Number – 080-880-0468
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