

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Date of issue: 10/14/2014 Version 1.0

SECTION 1. Identification

Product identifier

Product number SX0070

Product name Sand

CAS-No. 14808-60-7

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

Identified uses Reagent for analysis

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS-Labeling

Not a dangerous substance according to GHS.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula SiO₂ O₂Si (Hill)

Molar mass 60.08 g/mol

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

quartz (SiO2) (>= 90 % - <= 100 %)

14808-60-7

Exact percentages are being wihtheld as a trade secret.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Pneumokoniosis (silicosis)

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.

Advice for firefighters

none

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

Environmental precautions

No special precautionary measures necessary.

Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at room temperature.

Product number SX0070 Version 1.0

Product name Sand

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

	_	_		-	-		-		Т
In	_	ır	_	٦i	_	n	+	_	

Ingredients									
Basis	Value	Threshold limits	Remarks						
General threshold limit value for dust									
ACGIH	Time Weighted Average (TWA):	10 mg/m³	Form of exposure: Inhalable particles.						
	Time Weighted Average (TWA):	3 mg/m³	Form of exposure: Respirable particles.						
Z1A	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Respirable fraction.						
	Time Weighted Average (TWA):	15 mg/m³	Form of exposure: Total dust.						
	Time Weighted Average (TWA):	50 millions of particles per cubic foot of air	Form of exposure: Total dust.						
	Time Weighted Average (TWA):	15 millions of particles per cubic foot of air	Form of exposure: Respirable fraction.						
	Time Weighted Average (TWA):	15 mg/m³	Form of exposure: Total dust.						
	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Respirable fraction.						
OSHA_TRANS	PEL:	5 mg/m³	Form of exposure: Respirable fraction.						
	PEL:	15 mg/m³	Form of exposure: Total dust.						
quartz (SiO2)	14808-60-7								
ACGIH	Time Weighted Average (TWA):	0.025 mg/m ³	Form of exposure: Respirable fraction.						
NIOSH/GUIDE	Recommended exposure limit (REL):	0.05 mg/m³	Form of exposure: Respirable dust.						
Z1A	Time Weighted Average (TWA):	0.1 mg/m³	Form of exposure: Respirable dust.						
	Time Weighted Average (TWA):	0.1 mg/m³	The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. Form of exposure: Respirable.						
	Time Weighted Average (TWA):	0.3 mg/m³	The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits. Form of exposure: Total dust.						
	Time Weighted Average (TWA):	2.4 millions of particles per cubic foot of air	The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. Form of exposure: Respirable.						

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection

Safety glasses

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

Physical state solid

Color colorless

white

Odor odorless

Odor Threshold No information available.

pH No information available.

Melting point 1,713 °C

Boiling point/boiling range > 3,992 °F (> 2,200 °C)

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure No information available.

Relative vapor density No information available.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

Density 2.65 g/cm³

at 68 °F (20 °C)

Relative density No information available.

Water solubility at 68 °F (20 °C)

insoluble

Partition coefficient: n-

octanol/water

No information available.

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

Bulk density ca. 1,400 kg/m³

Particle size Particle size

0.2 - 0.8 mm

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

no information available

Conditions to avoid

no information available

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Inhalation, Eye contact, Skin contact, Ingestion

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

Target Organs

Eyes

Respiratory system

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC Group 1: Carcinogenic to humans

quartz (SiO2) 14808-60-7

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP Known carcinogen.

quartz (SiO2) 14808-60-7

ACGIH A2: Suspected human carcinogen

quartz (SiO2) 14808-60-7

Further information

Quantitative data on the toxicity of this product are not available.

Further toxicological data:

After inhalation of dust:

Chronic intoxication:

Pneumokoniosis (silicosis)

Other information

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

No ecological problems are to be expected when the product is handled and used with due care and attention.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Ingredients
quartz (SiO2)

Pennsylvania Right To Know

Ingredients quartz (SiO2)

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number SX0070 Version 1.0

Product name Sand

New Jersey Right To Know

Ingredients quartz (SiO2)

California Prop 65 Components

WARNING: this product contains a chemical known in the State of California to cause cancer.

Ingredients quartz (SiO2)

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Date of issue:10/14/2014

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.