3000 Course

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 08/10/2020 Supersedes: 05/27/2016

SECTION 1: Identification

1.1. Identification

Product form	:	Substance
Substance name	:	3000 Course
Product code	:	3000 Blend
Formula	:	SiO2
Synonyms	:	MILLISIL M10 / MILLISIL M4 / MILLISIL M6 / MILLISIL M8 / MILLISIL NW6 / MILLISIL NW8 / quartz (SiO2) / quartz flour, conc respirable crystalline silica≥10% / SIKRON M300 / SIKRON M400 / SIKRON M500 / SIKRON M600
Other means of identification	:	3000 Course/50
BIG no	:	51142

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Industrial use: component Paint: component Adhesive: component Chemical substance for research

1.3. Supplier

Protective Industrial Polymers
7875 Bliss Parkway
North Ridgeville, Ohio 44039 - USA-Ohio
T 440-327-0015
www.protectpoly.com

1.4. Emergency telephone number

Emergency number	:	CHEMTREC: 800-424-9300 (Outside USA) 703-527-3887.

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Carcinogenicity Category 1A	H350	May cause cancer (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS-US) :

Signal word (GHS-US)	:	Danger
Hazard statements (GHS-US)	:	H350 - May cause cancer (Inhalation)
Precautionary statements (GHS-US)	:	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves P308+P313 - If exposed or concerned: Get medical advice/attention P405 - Store locked up P501 - Dispose of contents/container to in accordance with local regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name : 3000 Course

Name	Product identifier	%	GHS US classification
3000 Course			Carc. 1A, H350
Silicon Dioxide	(CAS-No.) 14808-60-7	98 – 100	Carc. 1A, H350
Aluminum Oxide (Non-Fibrous)	(CAS-No.) 1344-28-1	< 1.1	Not classified
Iron Oxide	(CAS-No.) 1309-37-1	< 0.1	Not classified
Titanium Dioxide	(CAS-No.) 13463-67-7	< 0.1	Carc. 2, H351

Full text of hazard classes and 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 : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after eye contact : Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms : Slightly harmful if swallowed. Not irritant to skin. Slightly irritant to respiratory organs. Slightly irritant to eyes.

Symptoms/injuries after inhalation : Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. ON CONTINUOUS EXPOSURE/CONTACT: Respiratory difficulties.

Symptoms/injuries after skin contact : Not irritating.

Symptoms/injuries after eye contact : Slight irritation.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Lung tissue affection/degeneration.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Adapt extinguishing media to the environment for surrounding fires.

5.2. Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD: Non combustible.

Explosion hazard : DIRECT EXPLOSION HAZARD: No direct explosion hazard.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : No specific fire-fighting instructions required.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.

Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. Wash contaminated clothes.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

Methods for cleaning up : Stop dust cloud by humidifying. Scoop solid spill into closing containers. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid raising dust. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Keep container tightly closed.

Hygiene measures : Observe very strict hygiene - avoid contact.

7.2. Conditions for safe storage, including any incompatibilities

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) bases.

Storage area : Store in a dry area. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: paper. synthetic material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

3000 Course	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	0.025 mg/m³ (Respirable fraction)
USA - OSHA - Occupational Exposure Limits	
Local name	Silica, crystalline quartz, respirable dust
Remark (OSHA)	(3) See Table Z-3.

Silicon Dioxide (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	0.025 mg/m³ (Respirable fraction)
USA - OSHA - Occupational Exposure Limits	
Local name	Silica, crystalline quartz, respirable dust
Remark (OSHA)	(3) See Table Z-3.

Aluminum Oxide (Non-Fibrous) (1344-28-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	1 mg/m³ (Respirable fraction)

Iron Oxide (1309-37-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Iron oxide (Fe O)
ACGIH TWA (mg/m³)	5 mg/m³ (Respirable fraction)
Remark (ACGIH)	Pneumoconiosis
USA - OSHA - Occupational Exposure Limits	
Local name	Iron oxide fume
OSHA PEL (TWA) (mg/m³)	10 mg/m³

Titanium Dioxide (13463-67-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Titanium dioxide
ACGIH TWA (mg/m³)	10 mg/m³
Remark (ACGIH)	LRT irr; A3
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (Total dust)
OSHA PEL (TWA) (mg/m³)	15 mg/m³

8.2. Appropriate engineering controls

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber. PVC

Hand protection:

Gloves

Eye protection:

Safety glasses. In case of dust production: protective goggles

Skin and body protection:

Protective clothing

Respiratory protection:

Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Crystalline solid. Crystalline powder.
Color	:	Colourless to white
Odor	:	Odourless
Odor threshold	:	No data available
pH	:	6 – 7
Melting point	:	1610 °C
Freezing point	:	No data available
Boiling point	:	2230 °C
Flash point	:	Not applicable
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	< 0.1 hPa (20 °C)
Relative vapor density at 20 °C	:	Not applicable
Relative density	:	2.6
Specific gravity / density	:	2650 kg/m³
Molecular mass	:	60.08 g/mol
Solubility	:	Insoluble in water. Substance sinks in water. Insoluble in organic solvents. Soluble in hydrogenfluoride. Water: insoluble, Literature
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available

Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

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

Aluminum Oxide (Non-Fibrous) (1344-28-1)	
LD50 oral rat	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	7.6 mg/l air (Equivalent or similar to OECD 403, 1 h, Rat, Male, Experimental value, Inhalation (aerosol))

Iron Oxide (1309-37-1)	
LD50 oral rat	> 10000 mg/kg body weight (Rat, Male, Experimental value, Oral)

Titanium Dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral, 14 day(s))
LC50 inhalation rat (mg/l)	> 6.82 mg/l (Other, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))

Skin corrosion/irritation	:	Not classified pH: 6 – 7
Serious eye damage/irritation	:	Not classified pH: 6 – 7
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	May cause cancer (Inhalation).

Titanium Dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Viscosity, kinematic	:	No data available
Potential Adverse human health effects and symptoms	:	Slightly harmful if swallowed. Not irritant to skin. Slightly irritant to respiratory organs. Slightly irritant to eyes.
Symptoms/injuries after inhalation	:	Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. ON CONTINUOUS EXPOSURE/CONTACT: Respiratory difficulties.
Symptoms/injuries after skin contact	:	Not irritating.
Symptoms/injuries after eye contact	:	Slight irritation.
Chronic symptoms	:	ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Lung tissue affection/degeneration.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	:	Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	:	No water pollutant (surface water).

Iron Oxide (1309-37-1)	
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

Titanium Dioxide (13463-67-7)	
LC50 fish 1	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 (algae)	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

3000 Course	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Silicon Dioxide (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Aluminum Oxide (Non-Fibrous) (1344-28-1)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Iron Oxide (1309-37-1)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Titanium Dioxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

Aluminum Oxide (Non-Fibrous) (1344-28-1)	
Bioaccumulative potential	No bioaccumulation data available.

Iron Oxide (1309-37-1)	
Bioaccumulative potential	No bioaccumulation data available.

Titanium Dioxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Aluminum Oxide (Non-Fibrous) (1344-28-1)	
Ecology - soil	No (test)data on mobility of the substance available.

Iron Oxide (1309-37-1)	
Surface tension	Not applicable (solid)
Ecology - soil	Adsorbs into the soil.

Titanium Dioxide (13463-67-7)	
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove to an authorized dump (Class I).

Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Proper Shipping Name (DOT) : Not Regulated

Other information : No supplementary information available.

Transportation of Dangerous Goods

Proper Shipping Name (Transportation of Dangerous Goods) : Not Regulated

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

3000 Course
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silicon Dioxide (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum Oxide (Non-Fibrous) (1344-28-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Iron Oxide (1309-37-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Titanium Dioxide (13463-67-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Titanium Dioxide (13463-67-7)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

3000 Course
Listed on IARC (International Agency for Research on Cancer)

Silicon Dioxide (14808-60-7)
Listed on IARC (International Agency for Research on Cancer)

Titanium Dioxide (13463-67-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

3000 Course	
State or local regulations	U.S. - New Jersey - Right to Know Hazardous Substance List

Titanium Dioxide (13463-67-7)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
Silicon Dioxide(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List
Aluminum Oxide (Non-Fibrous)(1344-28-1)	U.S. - New Jersey - Right to Know Hazardous Substance List
Iron Oxide(1309-37-1)	U.S. - New Jersey - Right to Know Hazardous Substance List
Titanium Dioxide(13463-67-7)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

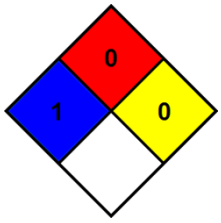
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Other information : Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

Full text of H-phrases:

H350	May cause cancer
H351	Suspected of causing cancer

NFPA health hazard	:	1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	:	0 - Materials that will not burn.
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Hazard Rating

Health	:	1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	:	0 Minimal Hazard - Materials that will not burn
Physical	:	0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product