



# ELL Uncrad Laminate

## Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2024 (HazCom 2024)  
Issue date: Feb.2 2022 Revision date: Feb.1 2026

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : ELL Uncrad Laminate ELL 101, ELL 102, ELL 103, ELL 105

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Laminate for consumer and industrial electronics.

#### 1.3. Supplier

AGC Multi Material America Inc. 1420 W 12th Place Tempe, AZ 85281, USA T +1-480-967-5600	AGC Multi Material Singapore Pte. Ltd. 4 Gul Crescent Jurong, Singapore 629520 T +65-6861-7117	AGC Multi Material Europe SASU 25 Rue du Lyonnais 69800 Saint-Priest, France T +33-6-15-75-21-53
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#### 1.4. Emergency telephone number

Emergency number :  
AGC Multi Material America Inc. : +1-480-967-5600 (9am - 5pm MST) M - F  
AGC Multi Material Singapore Pte. Ltd. : +65-6861-7117 (9am - 5pm SST) M - F  
AGC Multi Material Europe SASU : +33-6-15-75-21-53 (9am - 5pm CET) M - F

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 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

Not applicable

#### 3.2. Mixtures

Name	Product identifier	Conc. (% w/w)
Glass, oxide, chemicals (ELL 101, ELL 102, ELL 103)	CAS-No.: 65997-17-3	20 – 50
Silica (ELL 105)	CAS-No.: 7631-86-9	20 – 50
Silicon dioxide	CAS-No.: 60676-86-0	12 – 25

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The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Adapt extinguishing media to the environment for surrounding fires.
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#### 5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
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##### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area.

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### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Store always product in container of same material as original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Australia

Silica, vitreous (60676-86-0)	
Australia - Occupational Exposure Limits	
Local name	Silica, fused
OES TWA	0.05 mg/m <sup>3</sup>
Remark (AU)	See Silica - Crystalline
Regulatory reference	Workplace exposure standards for airborne contaminants (2024)

Silicon dioxide (7631-86-9)	
Australia - Occupational Exposure Limits	
Local name	Silica – Amorphous: Fumed silica
OES TWA	2 mg/m <sup>3</sup> respirable dust
Remark (AU)	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Regulatory reference	Workplace exposure standards for airborne contaminants (2024)

#### Canada

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<b>Glass, oxide, chemicals (65997-17-3)</b>	
<b>Canada (Alberta) - Occupational Exposure Limits</b>	
Local name	Synthetic Vitreous Fibres: Glass Fibres Continuous filament
OEL TWA	1 fibers/cm <sup>3</sup> 5 mg/m <sup>3</sup> Total
Notations and remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 150/2020)
<b>Canada (Quebec) - Occupational Exposure Limits</b>	
Local name	Fibres-artificial vitreous mineral fibres - Fibrous glass, continuous filament
VEMP (OEL TWAEV)	1 fibers/cm <sup>3</sup>
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
<b>Canada (British Columbia) - Occupational Exposure Limits</b>	
Local name	Synthetic Vitreous Fibres - Continuous filament glass fibres
OEL TWA	1 fibers/cm <sup>3</sup> 5 mg/m <sup>3</sup> Inhalable
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
<b>Canada (Manitoba) - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Notations and remarks	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
<b>Canada (Newfoundland and Labrador) - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Notations and remarks	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
<b>Canada (Nova Scotia) - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Notations and remarks	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
Local name	Continuous filament glass fibres (Synthetic Vitreous Fibres (Man Made Mineral Fibres))
OEL TWAEV	5 mg/m <sup>3</sup> (I - Inhalable fraction) 1 fiber/mL (F - Respirable fibres)

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<b>Glass, oxide, chemicals (65997-17-3)</b>	
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
<b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Notations and remarks	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
ACGIH OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021

<b>Silicon dioxide (60676-86-0)</b>	
<b>Canada (Quebec) - Occupational Exposure Limits</b>	
Local name	Silica - Amorphous, fused
VEMP (OEL TWAEV)	0.1 mg/m <sup>3</sup> Rd
Notations and remarks	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
<b>Canada (Nunavut) - Occupational Exposure Limits</b>	
Local name	Silica, fused
OEL TWA	0.1 mg/m <sup>3</sup> (respirable fraction)
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
<b>Canada (Northwest Territories) - Occupational Exposure Limits</b>	
Local name	Silica, fused
OEL TWA	0.1 mg/m <sup>3</sup> (respirable fraction)
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
Local name	Silica fused
OEL TWAEV	0.1 mg/m <sup>3</sup> (R - Respirable fraction)
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
<b>Canada (Saskatchewan) - Occupational Exposure Limits</b>	
Local name	Silica Amorphous: Silica, fused
OEL TWA	0.1 mg/m <sup>3</sup> (respirable fraction)
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

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### China & Hong Kong

<b>Silicon dioxide (7631-86-9)</b>	
<b>China - Occupational Exposure Limits</b>	
Local name	沉淀SiO <sub>2</sub> (白炭黑) # Precipitated silica dust
OEL PC-TWA	5 mg/m <sup>3</sup> 总尘
Regulatory reference	GBZ 2.1-2019

### European Union

<b>Glass, oxide, chemicals (65997-17-3)</b>	
<b>EU - Binding Occupational Exposure Limit (BOEL)</b>	
Local name	Refractory ceramic fibres: Glass, oxide, chemicals
BOEL TWA	0.3 fibers/mL
Regulatory reference	DIRECTIVE (EU) 2019/130 (amending Directive 2004/37/EC)
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
ACGIH OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021

<b>Silicon dioxide (60676-86-0)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Kieselsäuren, amorphe: Kieselglas
MAK (OEL TWA)	0.3 mg/m <sup>3</sup> (A)
Regulatory reference	BGBl. II Nr. 156/2021
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Silices amorphes: fumées (fraction alvéolaire) # Siliciumdioxide (amorf): rook (inadembare fractie)
OEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Kvarcno staklo
GVI (OEL TWA)	0.08 mg/m <sup>3</sup> R (respirabilna prašina)
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Silikatglas

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<b>Silicon dioxide (60676-86-0)</b>	
OEL TWA	0.1 mg/m <sup>3</sup> respirabel
Regulatory reference	BEK nr 1619 af 19/12/2024
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	Kieselglas
AGW (OEL TWA)	0.3 mg/m <sup>3</sup> (A)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Silica, fused respirable dust
OEL TWA	0.08 mg/m <sup>3</sup>
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>Poland - Occupational Exposure Limits</b>	
Local name	Krzemionka bezpostaciowa i syntetyczna: krzemionka stopiona (szkło kwarcowe)
NDS (OEL TWA)	2 mg/m <sup>3</sup> frakcja wdychalna 1 mg/m <sup>3</sup> frakcja respirabilna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która stwarza zagrożenie dla zdrowia po zdeponowaniu w drogach oddechowych. Frakcja respirabilna – frakcja aerozolu wnikaćca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej.
Regulatory reference	Dz. U. 2024 poz. 1017 wraz z późn. zm.
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	kremenčevo steklo
OEL TWA	0.3 mg/m <sup>3</sup>
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Silica, fused
WEL TWA (OEL TWA)	0.08 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	silice fondue / Kieselgut
MAK (OEL TWA)	0.3 mg/m <sup>3</sup> (a) / (a)
Critical toxicity	Fibpulm / Lungenfibrose
Notation	SS <sub>C</sub> / SS <sub>C</sub>
Regulatory reference	www.suva.ch, 01.01.2025

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<b>Silicon dioxide (7631-86-9)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Kieselsäuren, amorphe
MAK (OEL TWA)	4 mg/m <sup>3</sup> (E)
Regulatory reference	BGBl. II Nr. 156/2021
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	Amorfní SiO <sub>2</sub>
PEL (OEL TWA)	4 mg/m <sup>3</sup> (pro celkovou koncentraci)
Remark	Prachy s možným fibrogenním účinkem.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)
<b>Estonia - Occupational Exposure Limits</b>	
Local name	Räni (ränidioksiid) (amorfne)
OEL TWA	2 mg/m <sup>3</sup> Respireeritav fraktsioon
Remark	1 (Peentolm koosneb alla 2,5-mikromeetrise läbimõõduga osakestest, mis võivad koos sissehingatava õhuga jõuda kopsualveoolidesse)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 02.04.2024, 13)
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	Kieselsäuren, amorphe
AGW (OEL TWA)	1 mg/m <sup>3</sup> (E)
Peak exposure limitation factor	8(II)
Remark	AGS - Ausschuss für Gefahrstoffe; 2 - Kolloidale amorphe Kieselsäure (7631-86-9) einschließlich pyrogener Kieselsäure und im Nassverfahren hergestellter Kieselsäure (Fällungskieselsäure, Kieselgel); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Silīcija dioksīds
OEL TWA	1 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2024. gada 26. martā noteikumiem Nr. 191).
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	silikagel
OEL TWA	4 mg/m <sup>3</sup>
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 29/2024 z dne 4. 4. 2024 - Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu

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<b>Silicon dioxide (7631-86-9)</b>	
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Silices amorphes [Dioxyde de silicium non cristallisé] / Kieselsäuren, amorphe [Diatomeenerde, Siliciumdioxid nichtkristallin]
MAK (OEL TWA)	4 mg/m <sup>3</sup> (i) / (e)
Critical toxicity	Fibpulm / Lungenfibrose
Notation	SS <sub>c</sub> / SS <sub>c</sub>
Regulatory reference	www.suva.ch, 01.01.2025

### Japan

<b>Glass, oxide, chemicals (65997-17-3)</b>	
<b>Japan - Occupational Exposure Limits (JSOH)</b>	
Local name	ガラス # glass, oxide, chemicals
JSOH OEL	0.01 mg/m <sup>3</sup> Agとして 0.05 mg/m <sup>3</sup> Cdとして 0.05 mg/m <sup>3</sup> Coとして 0.5 mg/m <sup>3</sup> Crとして 0.02 mg/m <sup>3</sup> 吸入性粉塵、Mnとして、有機マンガンを除く 0.1 mg/m <sup>3</sup> 総粉塵、Mnとして、有機マンガンを除く 0.03 mg/m <sup>3</sup> Pbとして、アルキル鉛化合物を除く 0.1 mg/m <sup>3</sup> Sbとして、ステビンを除く 0.1 mg/m <sup>3</sup> Seとして、セレン化水素、六フッ素化セレンを除く
Regulatory reference	JCDB の調査による

### Korea

<b>Silica, vitreous (60676-86-0)</b>	
<b>Korea - Occupational Exposure Limits</b>	
Local name	산화규소(비결정체 규소, 용융된) # Silica (Amorphous silica, fused)
ISHA OEL TWA	0.1 mg/m <sup>3</sup> 호흡성 # (Respirable fraction)
Regulatory reference	고용노동부고시 제2020-48호 # MOEL Public Notice. No. 2020-48

<b>Silicon dioxide (7631-86-9)</b>	
<b>Korea - Occupational Exposure Limits</b>	
Local name	산화규소(비결정체 실리카겔) # Silica (Amorphous silicagel)
ISHA OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	고용노동부고시 제2020-48호 # MOEL Public Notice. No. 2020-48

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### Singapore

<b>Silicon dioxide (7631-86-9)</b>	
<b>Singapore - Occupational Exposure Limits</b>	
Local name	Silica gel
PEL (OEL TWA)	10 mg/m <sup>3</sup>
Regulatory reference	WSH (General Provision) Regulation 2014

### Taiwan

No additional information is available.

### United States

<b>ELL 101, ELL 102, ELL 103, ELL 105</b>	
No additional information available	
<b>Glass, oxide, chemicals (65997-17-3)</b>	
No additional information available	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Synthetic vitreous fibers - Continuous filament glass fibers
ACGIH OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter) 1 fibers/cm <sup>3</sup> (F - Respirable fibers)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021
<b>Silica (7631-86-9)</b>	
No additional information available	
<b>Silicon dioxide (60676-86-0)</b>	
No additional information available	
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Silica, fused, respirable dust
OSHA PEL TWA	20 mppcf
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formula: (80 mg/m <sup>3</sup> / (%SiO <sub>2</sub> )) for mg/m <sup>3</sup> . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Hand protection:</b>
Protective gloves

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<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Semi-solid. sheet.
Color	: White to yellow
Odor	: Slight Toluene
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.4 – 2.2 Relative evaporation rate (water=1)
Solubility	: Water solubility. Negligible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: Not classified.
Oxidizing properties	: Not oxidising.

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

<b>Glass, oxide, chemicals (65997-17-3)</b>	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)

<b>Silica (7631-86-9)</b>	
LD50 oral rat	3160 mg/kg Source: TOMES; HAZARDTEXT
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 5000 mg/kg Source: ECHA
ATE US (oral)	3160 mg/kg body weight
ATE US (dust, mist)	5.01 mg/l/4h

<b>Silicon dioxide (60676-86-0)</b>	
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit
LC50 Inhalation - Rat	> 2.08 mg/l air Animal: rat

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>Silica (7631-86-9)</b>	
NOAEL (chronic,oral,animal/male,2 years)	1800 – 3000 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (chronic,oral,animal/female,2 years)	1800 – 3200 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
IARC group	3 - Not classifiable

Reproductive toxicity : Reproductive toxicity: Not classified.

<b>Silicon dioxide (60676-86-0)</b>	
NOAEL (animal/male, F0/P)	5000 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:

STOT-single exposure : Not classified

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STOT-repeated exposure : Not classified.

<b>Silica (7631-86-9)</b>	
NOAEL (dermal,rat/rabbit,90 days)	≥ 10000 mg/kg body weight Animal: rabbit
<b>Silicon dioxide (60676-86-0)</b>	
NOAEL (oral,rat,90 days)	> 5000 mg/kg body weight Animal: rat, Animal sex: male

Aspiration hazard : Not classified  
Viscosity, kinematic : Not applicable  
Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.  
Symptoms/effects after ingestion : None under normal conditions.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>Silica (7631-86-9)</b>	
LC50 - Fish [1]	10000 mg/l Source: ECHA
EC50 - Crustacea [1]	> 5000 mg/l Source: ECHA
LOEC (chronic)	149.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.  
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Sewage disposal recommendations : Disposal must be done according to official regulations.  
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.  
Additional information : Do not re-use empty containers.

### SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

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### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

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

### 14.3. Transport hazard class(es)

#### DOT

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

#### IMDG

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

#### IATA

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

### 14.4. Packing group

Packing group (DOT) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### DOT

No data available

#### IMDG

No data available

#### IATA

No data available

### 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. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### Australia

##### Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS introductions Inventory) status:

All the chemicals contained in this product are listed.

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### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No additional information is available.

### Australian Pesticides and Veterinary Medicines Authority (APVMA)

No additional information is available.

### Canada

<b>Glass, oxide, chemicals (65997-17-3)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Silicon dioxide (60676-86-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Silica (7631-86-9)</b>
Listed on the Canadian DSL (Domestic Substances List)

### China & Hong Kong

<b>New Chemical Substance Environmental Management Registration Measures (MEE Order 12 of 2020)</b>	
<b>Inventory of Existing Chemical Substances in China (IECSC)</b>	Contains listed substance(s) Glass, oxide, chemicals (CAS-No. 65997-17-3) Silica, vitreous (CAS-No. 60676-86-0) Silica (CAS-No. 7631-86-9)
<b>Law of the People's Republic of China on the Prevention and Control of Occupational Diseases</b>	
<b>Catalogue for Classification of Hazardous Factors of Occupational Diseases</b>	Contains listed substance(s) Glass wool dust (CAS-No. 65997-17-3)
<b>Regulations on the Safe Management of Hazardous Chemicals (Decree 591 of the State Council)</b>	
<b>Catalogue of Hazardous Chemicals (2015)</b>	Methyl benzene (CAS-No. 108-88-3) Considered as Hazardous Chemical(s)

### European Union

#### EU-Regulations

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### National regulations

##### Austria

Ordinance on Flammable Liquids (VbF) : Auto detect

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France	
<b>Occupational diseases</b>	
Code	Description
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

Override matching entry (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

### Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen : Glass, oxide, chemicals, Silicon dioxide are listed

SZW-lijst van mutagene stoffen : Glass, oxide, chemicals, Silicon dioxide are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : toluene is listed

### Switzerland

Storage class (LK) : NG - Non-hazardous

### Japan

Industrial Safety and Health Law	Dangerous or Harmful Substances for Labelling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 1 and 2, Appended Table No.9) Crystalline silica
	Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art.57-2, Enforcement Order, Art.18-2 Item 1 and 2, Appended Table 9) Crystalline silica (Ordinance number: 165-2) (under 5%)
	<b>【After amendment of April 2025】</b> Dangerous or Harmful Substances for Labelling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 2 to 3, Ordinance on Industrial Safety and Health, Art.30 Appended Table No.2) Crystalline silica
	<b>【After amendment of April 2026】</b> Dangerous or Harmful Substances for Labelling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 2 to 3, Ordinance on Industrial Safety and Health, Art.30 Appended Table No.2) Crystalline silica
	<b>【After amendment of April 2025】</b> Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art.57-2 Para.1, Enforcement Order, Art.18-2 Item 2 to 3, Ordinance on Industrial Safety and Health, Art.34-2 Appended Table No.2) Crystalline silica (under 5%)
	<b>【After amendment of April 2026】</b>

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	Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art.57-2 Para.1, Enforcement Order, Art.18-2 Item 2 to 3, Ordinance on Industrial Safety and Health, Art.34-2 Appended Table No.2) Crystalline silica (under 5%)
Foreign Exchange and Foreign Trade Control Act	Approval for Item 2-2 (Import Trade Control Order, Art.4, Para. 1, Item 2) (chloromethyl)vinylbenzene
	Export Approval (Export Trade Control Order, Appended Table 2) (chloromethyl)vinylbenzene
Pneumoconiosis Law	Dusty Works, Act, Art.2, Ordinance for Enforcement, Art.2, Appended Table Silica

### Korea

<b>Occupational Safety and Health Act</b>		
Threshold Limit Values Chemicals	Applicable	60676-86-0: Silica (Amorphous silica, fused)
Hazardous Substances Subject to Working Environment Measurement	Applicable	7631-86-9: Quartz (Measurement Cycle: 6 months)
Hazardous Substances Subject to Workers Requiring Health Examination	Applicable	7631-86-9: Mineral dusts (Examination Cycle: 24 months)
<b>Wastes Control Act</b>		
<b>Act on Registration and Evaluation of Chemicals (K-REACH)</b>		
Korea Existing Chemicals Inventory (KECI)	Applicable	65997-17-3: Glass, oxide (KECI-No.: KE-17630) 60676-86-0: Silica, vitreous (KECI-No.: KE-30959) 7631-86-9: Silicon dioxide (KECI-No.: KE-31032)

### Singapore

Regulation		Component / Mixture
Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations	Applicable	Silicon dioxide

### Taiwan

Occupational Safety and Health Act	Applicable	Glass, oxide, chemicals; Silica, vitreous; Silicon dioxide
Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste	Applicable	Glass, oxide, chemicals; Silica, vitreous; Silicon dioxide
Traffic Safety Rule	Applicable	Glass, oxide, chemicals; Silica, vitreous; Silicon dioxide

### 15.3. US State regulations



**WARNING:**

This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Component	State or local regulations
Silica (7631-86-9)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List

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Component	State or local regulations
Silicon dioxide (60676-86-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

### SECTION 16: Other information

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Revision date : February 1 2026

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.