

## 1 Identification

- **Product identifier**
- **Trade name: LUDOX® CL-X (+)**
- **Application of the substance / the preparation:**  
Intermediate product of varied applicability in industry and trade.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
W. R. Grace & Co.-Conn  
7500 Grace Drive  
Columbia MD 21044  
U. S. A.
- **Information department:**  
Health and Safety (9 AM to 5 PM-EST) 1-410-531-4000  
MSDS.Davison@grace.com
- **Emergency telephone number:**  
Chemtrec North America: +1-800-424-9300  
Chemtrec International: +1-703-527-3887  
Other Emergencies (24hr): +1-410-531-4000

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated  
Exposure 2

H373 May cause damage to the kidneys  
through prolonged or repeated exposure.  
Route of exposure: Oral.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
ethylene glycol
- **Hazard statements**  
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 If on skin: Wash with plenty of water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P401 Store in accordance with local/regional/national/international regulations.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 1)

· **Hazard not otherwise classified**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**3 Composition/information on ingredients**· **Chemical characterization: Mixtures**· **Description:** Water colloidal suspension of amorphous silica.· **CAS No. and description:**

CAS: 7732-18-5	water, distilled, or of similar purity	40-70%
CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	25-50%

· **List of Dangerous Components**

CAS: 107-21-1	ethylene glycol ⚠ Specific Target Organ Toxicity - Repeated Exposure 2, H373; ⚠ Acute Toxicity - Oral 4, H302	5-10%
CAS: 2682-20-4	2-methyl-2H-isothiazol-3-one ⚠ Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 2, H330; ⚠ Skin Corrosion 1B, H314; Eye Damage 1, H318; ⚠ Sensitization - Skin 1A, H317	<0.009%
CAS: 2634-33-5	1,2-benzisothiazol-3(2H)-one ⚠ Acute Toxicity - Inhalation 2, H330; ⚠ Eye Damage 1, H318; ⚠ Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Sensitization - Skin 1A, H317	<0.009%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.**4 First-aid measures**· **Description of first aid measures**· **General information:**

Immediately remove contaminated clothing if necessary to prevent direct skin contact.  
Take note of the following instructions

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:**

Immediately flush skin with water for at least 15 minutes.  
Remove contaminated clothing immediately.  
Generally the product does not irritate the skin.  
If skin irritation occur, consult a doctor.

· **After eye contact:**

Flush opened eye with large quantities of running water for at least 30 minutes. If symptoms occur, consult a doctor.

· **After swallowing:**

Do not induce vomiting; immediately call for medical help.  
Seek medical attention. Do not induce vomiting.

· **Information for doctor:**· **Most important symptoms and effects, both acute and delayed** Allergic reactions· **Indication of any immediate medical attention and special treatment needed**

Treat skin and mucous membrane with antihistamine and corticoid preparations.

— USA —

(Contd. on page 3)

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 2)

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Hazardous combustion products** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear personal protective equipment.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.
- **Environmental precautions:**  
Do not allow to enter sewers, surface or ground water.  
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

**PAC-1:**

CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	18 mg/m <sup>3</sup>
CAS: 107-21-1	ethylene glycol	30 ppm

**PAC-2:**

CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	740 mg/m <sup>3</sup>
CAS: 107-21-1	ethylene glycol	150 ppm

**PAC-3:**

CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	4,500 mg/m <sup>3</sup>
CAS: 107-21-1	ethylene glycol	900 ppm

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Only handle and refill product in appropriate systems.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Colloidal silica should be stored above 2 °C. Freezing temperatures can cause irreversible precipitation of the silica, therefore the product should be located in heated buildings. Avoid routine storage temperatures above 43 °C.

(Contd. on page 4)

USA

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 3)

- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Protect from frost.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

**CAS: 7732-18-5 water, distilled, or of similar purity**

PEL	Long-term value: - OSHA TWA: NONE ESTABLISHED
TLV	Long-term value: - ACGIH TWA: NONE ESTABLISHED

**CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

IDLH	Short-term value: 3000 mg/m <sup>3</sup> IDLH: Immediately Dangerous to Life or Health
PEL	Long-term value: 80mg/m <sup>3</sup> /%SiO <sub>2</sub> mg/m <sup>3</sup> OSHA TWA for amorphous silica
REL	Long-term value: 6 mg/m <sup>3</sup> NIOSH TWA
TLV	Long-term value: 10* 5** mg/m <sup>3</sup> OSHA TWA *Total dust **Respirable fraction

**CAS: 107-21-1 ethylene glycol**

TLV	Short-term value: 10** mg/m <sup>3</sup> , 50* ppm Long-term value: 25* ppm *vapor fraction:**inh. fraction, aerosol only, A4
WEEL	I (2)

- **DNELs**

**CAS: 107-21-1 ethylene glycol**

Dermal	DNEL(long-systemic)	53 mg/kg bw /day (General population) ECHA 2011 106 mg/kg bw /day (Worker) ECHA 2011
Inhalative	DNEL(long-local)	7 mg/m <sup>3</sup> (General population) ECHA 2011 35 mg/m <sup>3</sup> (Worker) ECHA 2011

**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**

Dermal	DNEL(long-systemic)	0.345 mg/kg bw /day (General population) ECHA 2019 0.966 mg/kg bw /day (Worker) ECHA 2019
Inhalative	DNEL(long-systemic)	1.2 mg/m <sup>3</sup> (General population) ECHA 2019 6.81 mg/m <sup>3</sup> (Worker) ECHA 2019

(Contd. on page 5)

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 4)

**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**

Oral	DNEL(long-systemic)	0.027 mg/kg bw /day (General population) ECHA 2019
	DNEL(acute-systemic)	0.053 mg/kg bw /day (General population) ECHA 2019
Inhalative	DNEL(acute-local)	0.043 mg/m <sup>3</sup> (General population) ECHA 2019
		0.043 mg/m <sup>3</sup> (Worker) ECHA 2019
	DNEL(long-local)	0.021 mg/m <sup>3</sup> (General population) ECHA 2019
		0.021 mg/m <sup>3</sup> (Worker) ECHA 2019

**· PNECs****CAS: 107-21-1 ethylene glycol**

PNEC	1.53 mg/kg (soil) ECHA 2011
	20.9 mg/kg (sediment (freshwater)) ECHA 2011
PNEC	10 mg/l (aqua-freshwater) ECHA 2011
	10 mg/l (aqua-intermittent releases) ECHA 2011
	1 mg/l (aqua-marine water) ECHA 2011
	199.5 mg/l (Sewage Treatment Plant) ECHA 2011

**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**

PNEC	3 mg/kg (soil) ECHA 2019
PNEC	4.03 µg/l (aqua-freshwater) ECHA 2019
	0.403 µg/l (aqua-marine water) ECHA 2019
PNEC	49.9 µg/kg (sediment (freshwater)) ECHA 2019
	4.99 µg/kg (sediment (marine water)) ECHA 2019
PNEC	1.03 mg/l (Sewage Treatment Plant) ECHA 2019

**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**

PNEC	0.047 mg/kg (soil) ECHA 2019
PNEC	3.39 µg/l (aqua-freshwater) ECHA 2019
	3.39 µg/l (aqua-marine water) ECHA 2019
PNEC	0.23 mg/l (Sewage Treatment Plant) ECHA 2019

**· Additional information:** Valid lists at time of creation were used as basis.

(Contd. on page 6)

— USA —

**Trade name: LUDOX® CL-X (+)**

(Contd. of page 5)

· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

Avoid contact with the skin.

Immediately remove all soiled and contaminated clothing.

The usual precautionary measures for handling chemicals should be followed.

Do not inhale gases / fumes / aerosols.

Do not breathe dust or spray mist.

Use skin protection cream for skin protection.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Required if the Occupational Exposure Limit (OEL) value is exceeded. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.

Use suitable respiratory protective device in case of insufficient ventilation. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

· **Protection of hands:**

Protective gloves

Wear gloves for the protection against mechanical hazards.

Use gloves of stable material

Check protective gloves prior to each use for their proper condition.

Check the permeability prior to each new use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.35$  mm

· **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

· **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

· **Not suitable are gloves made of the following materials:**

Leather gloves

Strong fabric gloves

· **Eye protection:**

Safety glasses

(Contd. on page 7)

USA

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 6)

· **Skin and Body protection:** Protective work clothing**9 Physical and chemical properties**· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Fluid
Color:	Cloudy

· **Odor:** Odorless· **Odor threshold:** Not applicable.· **pH-value at 25 °C (77 °F):** 8.5-9.5· **Change in condition**

Melting point/Melting range:	0 °C (32 °F) (water)
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Boiling point/Boiling range:	100 °C (212 °F) (water)
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· **Conditions of flammability**

Flash point:	Not determined.
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· **Flammability (solid, gaseous):** Product is not flammable.· **Auto igniting:** Not applicable.· **Decomposition temperature:** Not applicable.· **Auto ignition temperature:** Product is not self-igniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**

Lower:	Not applicable.
Upper:	Not applicable.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)  
(water)· **Density at 20 °C (68 °F):** 1.3-1.4 g/cm<sup>3</sup> (10.8485-11.683 lbs/gal)· **Vapor density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with**

Water:	Fully miscible.
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· **Coefficient of water/oil distribution:** Not determined.· **Viscosity:**

Dynamic at 20 °C (68 °F):	max. 50 mPas
Kinematic:	Not determined.

**10 Stability and reactivity**· **Reactivity** No further relevant information available.· **Chemical stability** No decomposition if used and stored according to specifications.· **Possibility of hazardous reactions** No dangerous reactions known.· **Conditions to avoid** No further relevant information available.

(Contd. on page 8)

USA

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 7)

- **Incompatible materials:**  
Protect from contamination.  
No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**· **Information on toxicological effects**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:**

Oral	LD50	>5,000 mg/kg (ATE)
Dermal	LD50	>5,000 mg/kg (ATE)
Inhalative	LC50 (4h)	>5,000 mg/l (ATE)

**CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC0	>140->2,000 mg/m <sup>3</sup> /4h (rat) (OCED 403) Maximum attainable concentration, mortality does not appear.

**CAS: 107-21-1 ethylene glycol**

Oral	LD50	7,712 mg/kg (rat) ECHA 2014
Dermal	LDLo	786 mg/kg (human being)
	LD50	>3,500 mg/kg (rabbit) ECHA 2014

**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**

Oral	LD50	450 mg/kg (ATE) EU-CLH (21st ATP) 454 mg/kg (rat) (OECD 401) ECHA 2019
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402) ECHA 2019

**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**

Oral	LD50	183-235 mg/kg (rat) (OECD 401) ECHA 2019
Dermal	LD50	242 mg/kg (rat) (OECD 402) ECHA 2019
Inhalative	LC50 (4h)	0.11 mg/l (rat) (OECD 403) ECHA 2019

· **Primary irritant effect:**· **on the skin:****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Irritation of skin	IS	0 (rabbit) (OECD 404)
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**CAS: 107-21-1 ethylene glycol**

Irritation of skin	IS	0 (rabbit) (in vivo) ECHA 2011
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**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**

Irritation of skin	IS	(rabbit) (OECD 404) corrosive ECHA 2019
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(Contd. on page 9)



Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 8)

· **on the eye:****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Irritation of eyes IS 0 (rabbit) (OECD 405)

**CAS: 107-21-1 ethylene glycol**Irritation of eyes IS 0 (rabbit) (in vivo)  
ECHA 2011· **Sensitization:** No sensitizing effects known.· **Respiratory sensitization** No further relevant information available.· **Skin sensitization****CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**Sensitization SI (guinea pig) (OECD 406)  
sensitising  
ECHA 2019**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**Sensitization SI >6 (mouse) (OECD 429)  
ECHA 2019· **Additional toxicological information:**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Repeated dose toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral NOAEL (90 d) 9,000 mg/kg bw/day (rat) (OECD 408)

Inhalative NOAEL (90d) 31 mg/m<sup>3</sup> (rat) (OECD 413)· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**· **Carcinogenicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**Oral NOAEL (carcinogenicity) 3,950-5,530 mg/kg bw/day (mouse)  
Literature  
1,830 mg/kg bw/day (rat)  
Literature· **Mutagenicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**AMES Test >5 mg/plate (in-vitro) (OECD 471)  
negative, with and without metabolic activation  
ECHA 2012· **Reproductive toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral NOAEL (maternal toxicity) 1,350 mg/kg bw/day (rat) (OECD 414)

NOAEL (teratogenicity) 1,350 mg/kg bw/day (rat) (OECD 414)

· **Specific target organ toxicity (single exposure)** No further relevant information available.

(Contd. on page 10)

USA

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 9)

· **Specific target organ toxicity (repeated exposure)** No further relevant information available.**12 Ecological information**· **Toxicity**· **Aquatic toxicity:**· **Fish toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

LC0 (96 h) (static) 10,000 mg/l (zebra fish) (OECD 203)

**CAS: 107-21-1 ethylene glycol**LC50 (96 h) 72,860 mg/l (Pimephales promelas)  
ECHA 2011LC50 (24 h) >5,000 mg/l (carp)  
IUCLID Dataset 18-Feb-2000NOEC (7 d) 15,380 mg/l (Pimephales promelas) (EPA 600/4-90/027)  
ECHA 2011**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**LC50 (96 h) 2.18 mg/l (Oncorhynchus mykiss) (OECD 201)  
ECHA 2019**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**LC50 (96 h) 4.77 mg/l (Oncorhynchus mykiss) (OECD 203)  
ECHA 2019· **Water flea toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

EC50 (24 h) &gt;1,000 mg/l (Daphnia magna) (OECD 202)

**CAS: 107-21-1 ethylene glycol**EC50 (48 h) >100 mg/l (Daphnia magna) (OECD 202)  
ECHA 2011**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**EC50 (48 h) 2.94 mg/l (Daphnia magna) (OECD 202)  
ECHA 2019**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**EC50 (48 h) 0.85 mg/l (Daphnia magna) (OECD 202)  
ECHA 2019· **Algae toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**EC50 (72 h) >10,000 mg/l (Scenedesmus subspicatus) (OECD 201)  
comparable substance**CAS: 107-21-1 ethylene glycol**EC50 (96 h) 6,500-13,000 mg/l (Selenastrum capricornutum) (EPA 600/9-78-018)  
ECHA 2011**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**EC50 (72 h) 0.11 mg/l (Pseudokirchneriella subcapitata) (OECD 201)  
ECHA 2019**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**EC50 (72 h) 0.103 mg/l (Pseudokirchneriella subcapitata) (OECD 201)  
ECHA 2019

(Contd. on page 11)

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 10)

· **Bacterial toxicity****CAS: 107-21-1 ethylene glycol**EC50 (16h) 10,000 mg/l (Pseudomonas putida)  
IUCLID Dataset 18-Feb-2000**CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one**EC50 (3 h) 13 mg/l (sludge) (OECD 209)  
ECHA 2019**CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one**EC50 (3 h) 41 mg/l (sludge) (OECD 209)  
ECHA 2019

- **Persistence and degradability** No further relevant information available.
- **Other information:** Amorphous silica dioxide is chemically and biologically inert.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:** Do not allow product to reach ground water, water course or sewage system.
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not determined.
    - **vPvB:** Not determined.
  - **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Precautions for disposal:**
- **Recommendation:**

Disposal must be made according to official regulations.  
Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State/provincial and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state/provincial and local requirements.

**14 Transport information**

- |                                       |                 |
|---------------------------------------|-----------------|
| · <b>UN-Number</b>                    |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>    | Not applicable. |
| · <b>UN proper shipping name</b>      |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>    | Not applicable. |
| · <b>Transport hazard class(es)</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>    |                 |
| · <b>Class</b>                        | Not applicable. |
| · <b>Packing group</b>                |                 |
| · <b>DOT, ADR, IMDG, IATA</b>         | Not applicable. |
| · <b>Environmental hazards:</b>       | Not applicable. |
| · <b>Special precautions for user</b> | Not applicable. |

(Contd. on page 12)

USA

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 11)

- |   |  |
|---|--|
| · Segregation groups  | -  |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable.                                      |
| · Transport/Additional information:                                       | Not dangerous according to the above specifications. |

**15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA

## · SARA 302/304

None of the ingredients is listed.

## · SARA 313

CAS: 107-21-1 | ethylene glycol

- SARA 311/312 Specific target organ toxicity (single or repeated exposure).

## · TSCA (Toxic Substances Control Act):

CAS: 7732-18-5	water, distilled, or of similar purity	ACTIVE
CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	ACTIVE
CAS: 107-21-1	ethylene glycol	ACTIVE
CAS: 2634-33-5	1,2-benzisothiazol-3(2H)-one	ACTIVE
CAS: 2682-20-4	2-methyl-2H-isothiazol-3-one	ACTIVE

## · Hazardous Air Pollutants

CAS: 107-21-1 | ethylene glycol

## · Proposition 65

## · Chemicals known to cause cancer:

None of the ingredients is listed.

## · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

## · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

## · Chemicals known to cause developmental toxicity:

CAS: 107-21-1 | ethylene glycol

## · Carcinogenic categories

## · EPA (Environmental Protection Agency)

None of the ingredients is listed.

## · TLV (Threshold Limit Value)

CAS: 107-21-1 | ethylene glycol

## · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

## · Canadian DSL

CAS: 7732-18-5	water, distilled, or of similar purity
CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared
CAS: 107-21-1	ethylene glycol
CAS: 2634-33-5	1,2-benzisothiazol-3(2H)-one
CAS: 2682-20-4	2-methyl-2H-isothiazol-3-one

(Contd. on page 13)

USA

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 12)

· **Canadian NDSL**

None of the ingredients is listed.

· **European EINECS**

All ingredients are listed or exempted from listing.

· **Philippines Inventory of Chemicals and Chemical Substances PICCS**

All ingredients are listed or exempted from listing.

· **Inventory of the Existing Chemical Substances manufactured or imported in China IECSC**

CAS: 7732-18-5 water, distilled, or of similar purity

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

CAS: 107-21-1 ethylene glycol

CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one

CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one

· **Australian Inventory of Industrial Chemicals (AIIC)**

All ingredients are listed or exempted from listing.

· **Japanese Existing and New Chemical Substance List ENCS**

CAS: 7732-18-5 water, distilled, or of similar purity

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

CAS: 107-21-1 ethylene glycol

CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one

CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one

1-548

2-230

9-1845

5-5235

· **Korean Existing Chemical Inventory KECI**

CAS: 7732-18-5 water, distilled, or of similar purity

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

CAS: 107-21-1 ethylene glycol

CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one

CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one

KE-35400

KE-31032

KE-13169

KE-02680

KE-24316

· **TCSCA (Taiwan)**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

EPEP4A01648271

· **Russian Register of Potentially Hazardous Chemical and Biological Substances (RPOHV)**

CAS: 7732-18-5 water, distilled, or of similar purity

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

CAS: 107-21-1 ethylene glycol

CAS: 2634-33-5 1,2-benzisothiazol-3(2H)-one

CAS: 2682-20-4 2-methyl-2H-isothiazol-3-one

№ AT-007627 от 25.02.2014 г.

№ AT-000209 от 18.01.1995 г.

№ BT-000123 от 26.10.1994 г.

№ BT-001878 от 05.12.2000 г.

№ BT-002951 от 12.09.2007 г.

· **New Zealand Inventory of Chemicals (NZIoC)**

All ingredients are listed or exempted from listing.

· **Existing Chemical Directory of Thailand (DIW)**

All ingredients are listed or exempted from listing.

· **TCSI - Taiwan Chemical Substance Inventory**

All ingredients are listed or exempted from listing.

· **Mexican National Inventory of Chemical Substances (INSQ)**

All ingredients are listed or exempted from listing.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 14)

USA

Trade name: **LUDOX® CL-X (+)**

(Contd. of page 13)

· **Hazard pictograms**

GHS08

· **Signal word** Warning· **Hazard-determining components of labeling:**

ethylene glycol

· **Hazard statements**

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P401 Store in accordance with local/regional/national/international regulations.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

\* Product presents long-term adverse effects.



Health = \*1

Fire = 0

Reactivity = 0

· **Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Department issuing SDS:** GRACE Safety & Health Department

(Contd. on page 15)

Printing date 07/25/2024

Version: 2.0

Reviewed on 07/25/2024

Trade name: LUDOX® CL-X (+)

(Contd. of page 14)

• **Other information:**

The applicable regulations and industrial hygiene standards have to be considered.

• **Contact:**

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• **Other information:**

• **Date of preparation / last revision** 07/25/2024 / 1.2

• **The first date of preparation** 03/03/2020

• **Number of revision times and the latest revision date** 2.0 / 07/25/2024

• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ECHA: European Chemical Agency

EPA: Environmental Protection Agency

EC50: Half maximal effective concentration

NOAEL: No Observed Adverse Effect Level

BCF: Bioconcentration Factor

CLH: Harmonised classification and labelling

ADR: Accord relatif au transport international des marchandises dangereuses par route (Agreement Concerning the Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

(Contd. on page 16)

USA

**Trade name: LUDOX® CL-X (+)**

(Contd. of page 15)

ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
ATE: Acute toxicity estimate values  
Acute Toxicity - Oral 3: Acute toxicity – Category 3  
Acute Toxicity - Oral 4: Acute toxicity – Category 4  
Acute Toxicity - Inhalation 2: Acute toxicity – Category 2  
Skin Corrosion 1B: Skin corrosion/irritation – Category 1B  
Skin Irritation 2: Skin corrosion/irritation – Category 2  
Eye Damage 1: Serious eye damage/eye irritation – Category 1  
Sensitization - Skin 1A: Skin sensitisation – Category 1A  
Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

- **Others** No further relevant information available.
- **\* Data compared to the previous version altered.**

— USA —