



SAFETY DATA SHEET LUDOX TMA

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

1.1. Product identifier

Product name LUDOX TMA

Product number 60493

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

Identified uses Industrial application

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 60493

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Sens. 1 - H317

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.

LUDOX TMA

Precautionary statements	P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. 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. P501 Dispose of contents/ container in accordance with national regulations.
Contains	REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

WATER CAS number: 7732-18-5 EC number: 231-791-2	65-70%
Classification Not Classified	
SILICONE DIOXIDE CHEMICALLY PREPARED CAS number: 7631-86-9 EC number: 231-545-4 REACH registration number: 01-2119379499-16-XXXX	30-35%
Classification Not Classified	
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) CAS number: 55965-84-9 M factor (Acute) = 100 M factor (Chronic) = 100	<=0.01%
Classification Acute Tox. 3 - H301 Acute Tox. 2 - H310 Acute Tox. 2 - H330 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1A - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

LUDOX TMA

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact	May cause an allergic skin reaction.
Eye contact	May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	No known hazardous decomposition products.
--------------------------------------	--

5.3. Advice for firefighters

Protective actions during firefighting	Contain and collect extinguishing water.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.
-----------------------------	---

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
----------------------------------	--

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.
--------------------------------	---

6.4. Reference to other sections

LUDOX TMA

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 2°C and 43°C. Avoid freezing.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

SILICONE DIOXIDE CHEMICALLY PREPARED

Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust

WEL = Workplace Exposure Limit.

SILICONE DIOXIDE CHEMICALLY PREPARED (CAS: 7631-86-9)

DNEL Workers - Inhalation; Short term local effects: 4 mg/m³
Workers - Inhalation; Long term local effects: 4 mg/m³

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (CAS: 55965-84-9)

DNEL Workers - Inhalation; Long term local effects: 0.02 mg/m³
Workers - Inhalation; Short term local effects: 0.04 mg/m³
Consumer - Inhalation; Long term local effects: 0.02 mg/m³
Consumer - Inhalation; Short term local effects: 0.04 mg/m³
Consumer - Oral; Long term systemic effects: 0.09 mg/kg/day
Consumer - Oral; Short term systemic effects: 0.11 mg/kg/day

PNEC Fresh water; 3.32 µg/l
marine water; 3.32 µg/l
STP; 0.32 mg/l
Soil; 0.01 mg/kg/day
Sediment (Freshwater); 0.027 mg/kg/day
Sediment (Marinewater); 0.027 mg/kg/day

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Observe any occupational exposure limits for the product or ingredients. Provide adequate ventilation.

LUDOX TMA

Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber. Protective gloves should have a minimum thickness of 0.35 mm. The selected gloves should have a breakthrough time of at least 8 hours. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Take off immediately all contaminated clothing and wash it before reuse.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Particulate filter, type P2. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	cloudy
Odour	Odourless.
Odour threshold	No information available.
pH	pH (concentrated solution): 4.0-5.0
Melting point	0°C
Initial boiling point and range	100°C
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	3.2 kPa @ 25°C
Vapour density	No information available.
Relative density	1.2 @ 20°C
Solubility(ies)	Soluble in water.
Decomposition Temperature	No information available.

LUDOX TMA

Viscosity	7-10 mPa s @ 25°C
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.
<u>9.2. Other information</u>	
Other information	No information required.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
------------	--

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
-----------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
------------------------------------	--

10.4. Conditions to avoid

Conditions to avoid	Avoid freezing.
---------------------	-----------------

10.5. Incompatible materials

Materials to avoid	No information available.
--------------------	---------------------------

10.6. Hazardous decomposition products

Hazardous decomposition products	No known hazardous decomposition products.
----------------------------------	--

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
--------------------------------	--

Acute toxicity - dermal

Notes (dermal LD ₅₀)	Based on available data the classification criteria are not met.
----------------------------------	--

Acute toxicity - inhalation

Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
--------------------------------------	--

Skin corrosion/irritation

LUDOX TMA

Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	No information available.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No information available.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Inhalation</u>	
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
<u>Ingestion</u>	
Ingestion	May cause discomfort if swallowed.
<u>Skin contact</u>	
Skin contact	May cause an allergic skin reaction.
<u>Eye contact</u>	
Eye contact	May cause temporary eye irritation.

Toxicological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat OECD 401

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >140->2000 mg/m³, Inhalation, Rat OECD 403

Skin corrosion/irritation

Animal data Not irritating. Rabbit OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit OECD 405

Respiratory sensitisation

LUDOX TMA

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 49.6 - 75 mg/kg, Oral, Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 87.12 - 141 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 50.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 0.171 mg/l, Inhalation, Rat

ATE inhalation (vapours mg/l) 0.5

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

LUDOX TMA

Serious eye damage/irritation May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation Guinea pig: Sensitising.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Inconclusive data.

Genotoxicity - in vivo Chromosome aberration: Negative. Rat
Chromosome aberration: Negative. Mouse

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEL (90d) 16.3 - 24.7 mg/kg, Oral, Rat F1 Two-generation study,
Fertility - NOAEL (P) 2.8 - 4.4, (F1) 22.7 - 28, (F2) 35.7 - 39.1 mg/kg, Oral, Rat

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure. NOAEL (90 d) 16.3 - 24.7 mg/kg, Oral, Rat NOAEL (91 d) ≤0.104 mg/kg, Dermal, Rat
NOAEL (91 d) 0.00034 mg/l, Inhalation, Rat

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Ecotoxicity The product components are not classified as environmentally hazardous.
However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish No information available.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >10000 mg/l, Brachydanio rerio (Zebra Fish)
OECD 203

LUDOX TMA

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >1000 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >10000 mg/l, Scenedesmus subspicatus OECD 201

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute aquatic toxicity

LE(C)₅₀	0.001 < L(E)C ₅₀ ≤ 0.01
M factor (Acute)	100
Acute toxicity - fish	LC ₅₀ , 96 hour: 0.19 - 0.22 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 203 NOEC, 36 day: 0.02 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 28 day: 0.098 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 14 day: 0.05 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 210
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 0.1 - 0.16 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 0.027- 0.048 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hour: 0.0012 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hour: 0.0014 mg/l, (Skeletonema costatum) OECD 201 ErC ₅₀ , 48 hour: 0.0052 mg/l, (Skeletonema costatum) NOEC, 48 hour: 0.00049 mg/l, (Skeletonema costatum)
Acute toxicity - microorganisms	EC ₅₀ , 3 hour: 7.92 mg/l, Activated sludge

Chronic aquatic toxicity

M factor (Chronic)	100
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 0.004 - 0.10 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Persistence and degradability	The product contains inorganic substances which are not biodegradable.
--------------------------------------	--

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Persistence and degradability	The product is not readily biodegradable.
--------------------------------------	---

LUDOX TMA

Biodegradation - Degradation <50%: 10 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient No information available.

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 3.6, Estimated value. : ,

Partition coefficient log Pow: -0.71 - 0.75 OECD 107

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No information available.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

SILICONE DIOXIDE CHEMICALLY PREPARED

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

LUDOX TMA

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

Not applicable.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.
DSL

LUDOX TMA

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Other information

LUDOX TMA

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

This is the first issue.

Revision date

12/06/2020

Version number

1.000

SDS number

60493

SDS status

Approved.

LUDOX TMA

Hazard statements in full

H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Signature

K Winter