27000 Kremer Color Paste - Titanium White

Revised edition: 15.04.2021 Version: 1.4 Printed: 01.08.2022

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. Product Identifier

Product Name:	*Kremer Color Paste - Titanium White*
Article No.:	*27000*
UFI:	*--*

1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Coloring agent for industrial purposes

Uses advised against:

1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company:	*Kremer Pigmente GmbH & Co. KG*
Address:	*Hauptstr. 41-47, 88317 Aichstetten, Germany*
Tel./Fax.:	*Tel +49 7565 914480, Fax +49 7565 1606*
Internet:	*www.kremer-pigmente.com*
EMail:	*info@kremer-pigmente.com*
Importer:	*--*

1. 4. Emergency No.

Emergency No.: *+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

1. 4. 2 Poison Center:

2. Hazards Identification

2. 1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2. 2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

No classification required according to the CLP/GHS guidelines.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

EUH208	May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Safety designation:

Hazardous components for labelling:

Other Hazards

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2. 3.

Contains a mixture of 5-Chloro-2-methylisothiazolin-3(2H)-one and 2-Methylisothiazol-3(2H)-one (3:1), 2-Methylisothiazolin-3(2H)-one: can cause allergic reactions.

3. Composition/Information on Ingredients

3. 1. Substance

3. 2. Mixture

Chemical Characterization: *Titanium dioxide pigment suspension. Contains PW 6, C.I. 77891.*

Information on Components / Hazardous Ingredients:

Titanium dioxide; REACH Reg. No. 01-2119489379-17-0016	50 - 70 %	CAS-Nr: 13463-67-7 EINECS-Nr: 236-675-5 EC-Nr: 022-006-00-2
Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol (H314-318-412)	2.5 - 3 %	CAS-Nr: 121375-86-8 EINECS-Nr: EC-Nr:
Alumina; REACH Reg. No. 01-21195248-35-xxxx	1 - 10 %	CAS-Nr: 1344-28-1 EINECS-Nr: 215-691-6 EC-Nr:
Polyethylene glycol HO-(CH2H20)n-H, average molecular mass 400	1 - 10 %	CAS-Nr: 25322-68-3 EINECS-Nr: 500-038-2 EC-Nr:
Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1) (H301-310-314-317-318-330-400-H410); REACH Reg. No. 01-2120764691-48	0.0002-0.0015%	CAS-Nr: 55965-84-9 EINECS-Nr: EC-Nr: 613-167-00-5

Additional information:

4. First Aid Measures

4. 1. Description of the First Aid Measures

General information:

Do not leave affected persons unattended.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.
Give artificial respiration in case breathing is not regular or if it has stopped.
In case of unconsciousness place patient stable in side position for transportation.

After skin contact:

Wash with soap and rinse with plenty of water.
Remove contaminated clothing and shoes.
In case of skin irritation consult physician.
Wash contaminated clothing before reuse.
Clean contaminated shoes before reuse.

After eye contact:

Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.

After ingestion:

Rinse mouth thoroughly with plenty of water. Do not induce vomiting. Consult physician immediately.
Drink water in small sips.
Never give anything by mouth to an unconscious person.
In case of unconsciousness, store, respectively transport in stable side position.

4. 2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No further information available.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO2), extinguishing powder, water spray.

Unsuitable extinguishing media:

None known.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon monoxide and carbon dioxide, metal oxides, oxides.
In case of fire: formation of nitrogen oxides.

5. 3. Advice for Firefighters

Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Further information:

6. Accidential Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear appropriate protective equipment. Keep spectators away.
Floor may be slippery; use care to avoid falling.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.
Contact local authorities if product pollutes soil or vegetation.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

6. 4. Reference to other Sections

Protective clothing, see Section 8.

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Wear adequate protective clothing (see para. 8).

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid contact with eyes, skin and clothing.

Hygienic measures:

Do not inhale gas/fumes/vapours/aerosols.

Wash hands at the end of work. Preventive skin protection recommended.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store the product in the original tightly sealed containers in a dry and cool place.

Protect product from direct sunlight.

Requirements for storage areas and containers:

Store in containers which correspond to the original packaging.

Store in correctly labelled containers.

Information on fire and explosion protection:

Do not store together with: foodstuffs and animal feed.

Storage class:

12; Non-combustible liquids (TRGS 510)

Further Information:

7. 3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

Titanium dioxide (CAS 13463-67-7), TLV (TRGS 900): 1.25 mg/m3 (8h, airborne dust), 10 mg/m3 (8h, inhalable dust); 2(II)

Polyethylene glycol (PEG) (CAS 25322-68-3), TLV: 200 mg/m3 (inhalable fraction, 2 (II)); 1000 mg/m3 (inhalable fraction, 8(II))

Aluminium oxide (CAS 1344-28-1): AGW (TRGS 900): 1.25

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mg/m3 (airborne dust), 10 mgl/m3 (inhalable dust); 2(II)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Titanium dioxide:
10 mg/m3 (worker, inhalation, long-term exposure - local effects)
700 mg/m3 bw/d (consumer, swallowing, short-term exposure - local effects)
Aluminium oxide (CAS 1344-28-1):
15.63 mg/m3 (worker, inhalation, long-term exposure - systemic and local effects)
6.58 mg/kg/bw (consumer, swallowing, long-term exposure - systemic effects)

Predicted No-Effect Concentration (PNEC):

Titanium dioxide:
Fresh water: 0.184 mg/l
Sea water: 0.0184 mg/l
Fresh water sediment: 1000 mg/l
Seawater sediment: 100 mg/l
Soil: 100 mg/kg
Sewage treatment system (STP): 100 mg/l
Intermittent release: 0.61 mg/l
Aluminium oxide:
Sewage treatment system (STP): 20 mg/l

Additional Information:

8. 2. Exposure Controls

Technical protective measures:

No further measures, see Section 7.
Ensure adequate ventilation, especially in confined areas.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.
Wash contaminated clothes before reuse.

Respiratory protection:

In case of formation of dust/vapor.
Recommended: respiratory mask with an ABEK-filter.

Hand protection:

Protective gloves

Protective glove material:

Polyvinyl chloride (PVC) (< 60 min)
Polychloropren (CR) (< 60 min)
Nitrile rubber (NBR) (< 60 min)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

9. Physical and Chemical Properties

9. 1. Information on Basic Physical and Chemical Properties

Form:	*liquid*
Color:	*white*
Odor:	*weak, characteristic*
Odor threshold:	*no information available*
pH-Value:	*6 - 8 (100 g/l H2O)*
Melting temperature:	*not determined*
Boiling temperature:	*> 100°C (1013 hPa)*
Flash point:	*>100°C (>212°F)*
Evaporation rate:	*not applicable*
Flammability (solid, gas):	*not applicable*
Upper explosion limit:	*no information available*
Lower explosion limit:	*no information available*
Vapor pressure:	*not determined*
Vapor density:	*No information available.*
Density:	*2 - 2.2 g/cm3 (20°C)*
Solubility in water:	*miscible*
Coefficient of variation (n-Octanol/Water):	*not determined*
Auto-ignition temperature:	*not applicable*
Decomposition temperature:	*No data available.*
Viscosity, dynamic:	*3000 - 5000 mPas (20°C)*
Explosive properties:	*not available*

Oxidizing properties:

no information available

Bulk density:

9. 2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

No information available.

10.2. Chemical Stability

The product is stable.

10.3. Possibility of Hazardous Reactions

None if handled and stored according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

No information available.

Thermal decomposition:

10.5. Imcompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11. 1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

> 2000 mg/kg (rat; OECD 401)
Titanium dioxide: > 2000 mg/kg (rat; OECD 401)
Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: LD50: > 2000 mg/kg (rat)
Polyethylene glycol 400 (25322-68-3): LD50: > 2000 mg/kg (rat; OECD 423)
Aluminium oxide: >5000 mg/kg (rat; OECD 401)

LD50, dermal:

> 5000 mg/kg (rabbit)
Titanium dioxide: > 5000 mg/kg (rabbit)

Polyethylene glycol 400 (25322-68-3): LD50: > 2000 mg/kg (ratte; OECD 402)

LC50, inhalation:

> 6.82 mg/l (4h, rat(m))

Titanium dioxide: > 6.82 mg/kg (4h, rat)

Reaction compound of: 5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1): 0.31 mg/l (4h, rat)

Polyethylene glycol 400 (25322-68-3): LC0: 2516 mg/m3 (6h, rat)

Primary effects

Irritant effect on skin:

No skin irritation (rabbit; OECD 404)

Titanium dioxide: non irritating (rabbit; OECD 404)

Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: Causes chemical burns.

Reactions compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): causes chemical burns

Polyethylene glycol 400 (25322-68-3): no irritating effect (rabbit; OECD 404)

Aluminium oxide: no skin irritation (rabbit; OECD 404)

Irritant effect on eyes:

No irritating effect (rabbit; OECD 405)

Titanium dioxide: non irritating (rabbit; OECD 405)

Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: risk of severe eye damage.

Reaktion compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): risk of severe eye damage.

Polyethylene glycol 400 (25322-68-3): no irritating effect (rabbit; OECD 405)

Aluminium oxide: no irritating effect (rabbit; OECD 405)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known (guinea pig; OECD 406).

Non sensitizing (OECD 429, Mouse Local Lymph Node Assay (LLNA))

Titanium dioxide:

No sensitization caused with laboratory animals (guinea pig; OECD 406).

Non sensitizing (OECD 429, Mouse Local Lymph Node Assay (LLNA))

Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): may cause sensitization by skin contact (guinea pig; OECD 406)

The product is a skin sensitizer, sub-category 1A (Mouse Local

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Lymph Node Assay (LLNA); OECD 429).

Polyethylene glycol 400 (25322-68-3): non sensitizing (guinea pig; OECD 406)

Mutagenicity:

In vitro genetic-toxicity: Ames-Test negative (OECD 471)

In vitro genetic toxicity: negative (ovaries of the chinese hamster, OECD 473)

In vitro genetic-toxicity: negative (OECD 476, mouse lymphona cells)

In vitro genetic-toxicity: micronucleus test: negative (fibroblasts of the chinese hamster; OECD 487)

In vivo genetic-toxicity: micronucleus negative (mouse, m/f; OECD 474)

Titanium dioxide:

In vitro genetic-toxicity: Ames-Test negative (OECD 471)

In vitro genetic toxicity: negative (ovaries of the chinese hamster, OECD 473)

In vitro genetic-toxicity: negative (OECD 476, mouse lymphona cells)

In vitro genetic-toxicity: micronucleus test: negative (fibroblasts of the chinese hamster; OECD 487)

In vivo genetic-toxicity: micronucleus negative (mouse, m/f; OECD 474)

Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol:

In vitro genetic-toxicity: Ames-Test negative (OECD 471)

Polyethylene glycol 400 (25322-68-3):

In vitro genetic-toxicity: Ames-Test negative (Salmonella typhimurium; OECD 471)

In vitro genetic toxicity: Mammalian Cell Test (ovaries of the chinese hamster, OECD 476): negative

Aluminium oxide: In vitro genetic-toxicity: Ames-Test negative (Bacteria; OECD 471)

Reproductive toxicity:

No reproductive toxicity expected.

Polyethylene glycol 400 (25322-68-3):

Effect on fertility:

Did not show any effects on the fertility and the early stage of embryonic development (oral, rat m/f; OECD 421)

Carcinogenicity:

No negative effects.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: no information available.

Repeated exposure:

NOAEL: > 1000 mg/kg (90d, rat (m/f), oral, daily; OECD 408)

NOEL: 2400 mg/kg (29d, rat (m), oral, 7 days/week; OECD 407)

Inhalation (Dust/Mist): 10 mg/m3 (2 yrs, 6 hours/day, rat m/f),

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Chronic toxicity

Titanium dioxide:

NOAEL: > 1000 mg/kg (90d, rat (m/f), oral, daily; OECD 408)

NOEL: 2400 mg/kg (29d, rat (m), oral, 7 days/week; OECD 407)

Inhalation (Dust/Mist): 10 mg/m3 (2 yrs, 6 hours/day, rat m/f), Chronic toxicity

Polyethylene glycol 400 (25322-68-3): NOAEL: 8000 mg/kg, LOAEL: 16000 mg/kg (90d, rat m/f, oral, daily 2000-24000 mg/kg bw/d)

Additional toxicological information:

Aspiration hazard: no data available

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulaton (EC) 2018/605.

12. Ecological Information

12. 1. Aquatic Toxicity

Fish toxicity:

LC50: > 100 mg/l (96h, Oncorhynchus mykiss; OECD 203)

LC50: > 10000 mg/l (96h, Cyprinodon variegatus; OECD 203)

Titanium dioxide (13463-67-7): LC50: >100 mg/l (96h, Oncorhynchus mykiss); LC50: > 10000 mg/l (96h, Cyprinodon variegatus; OECD 203)

Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: LC50: 17.8 mg/l (96h, Danio rerio)

Reaction mass of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): LC50: 0.58 mg/l (96h, Danio rerio)

Polyethylene glycol 400 (25322-68-3): LC50: > 100 mg/l (96h, Poecilia reticulata; OECD 203)

Aluminium oxide: LC50: > 100 mg/l (96h, Salmo trutta; OECD 203)

Daphnia toxicity:

EC50: > 100 mg/l (48h, Daphnia magna; OECD 202)

LC50: > 10000 mg/l (48h, Acartia tonsa)

Titanium dioxide: EC50: >100 mg/l (48, Daphnia magna; OECD 202); LC50: > 10000 mg/l (48h, Acartia tonsa)

Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): EC50: 1.02 mg/l (48h, Daphnia magna)

Polyethylene glycol 400 (25322-68-3): EC50: > 100 mg/l (48h, Daphnia magna; OECD 202)

Aluminium oxide: EC50: > 100 mg/l (48h, Daphnia magna; OECD 202)

Bacteria toxicity:

EC50: > 1000 mg/l (3h; active sludge; OECD 209)

Titanium dioxide (13463-67-7): EC50: > 1000 mg/l (3h, active sludge; OECD 209)

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Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: EC50: > 10000 mg/l (3h, active sludge; OECD 209)

Algae toxicity:

EC50: > 100 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)

Titanium dioxid (13463-67-7): EC50: > 100 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201); NOEC: > 100 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)

Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): EC50: 0.379 mg/l (72h, Pseudokirchneriella subcapitata); EC10: 0.188 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)

M-Factor (Acute): 100

M-Factor (Chronic): 100

Polyethylene glycol 400 (25322-68-3): ErC50: > 100 mg/l (72h, Desmodesmus subspicatus); NOEC: 56,02 mg/l (72h, Desmodesmus subspicatus)

Aluminium oxide: EC50: > 100 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)

12. 2. Persistency and Degradability

Titanium dioxide: not readily biodegradable.

Butanedoic acid, (dimethylphosphinyl)-, dimethyl ester, reaction products with lauryl alcohol and polyethylene glycol: 24 %, not readily biodegradable (28d; OECD 301D)

Reaction mass of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): Not readily biodegradable.

Polyethylene glycol 400 (25322-68-3): 70 %, Readily biodegradable (28d; OECD 301D)

Aluminium oxide: Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12. 3. Bioaccumulation

Polyethylene glycol 400: log POW 2.29

12. 4. Mobility

No information available.

12. 5. Results of PBT- und vPvP Assessment

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

12. 6. Other Adverse Effects

Water hazard class:

1, slightly hazardous

Behaviour in sewage systems:

Further ecological effects:

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulaton (EC) 2018/605.

Product does not contain relevant concentrations of heavy metals.

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The product does not contain any phosphates or phosphorus organic compounds.
Product does not contain nitrogen which may contribute to eutrophication.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Disposal should be avoided or minimized.
If possible reuse product.
According to the actual state of knowledge of the supplier, this product must not be treated as hazardous waste in the sense of EU guideline 2008/98/EC.

European Waste Code (EWC):

Uncleaned packaging:

Empty container completely.
Contaminated packaging must be disposed like the substance.
Do not reuse container.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

Not classified as environmentally hazardous.

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14. 8. Further Information

Do not store together with foodstuffs.

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (according to the German Regulation AwSV using the mixing rule)

Local regulations on chemical accidents:

Seveso III Directive: not applicable under Directive 2012/18/EC.

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Chemical Weapons Convention (CWC), Lists of toxic chemicals and raw materials: not forbidden and/or restricted

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15. 3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

16. Other Information

This product should be stored, handled and used in accordance

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with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.