

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

1.1 Product identifier

Trade name: TitanCare TT

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

General use: Antibacterial-Antiviral Nano-coating
Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company name: Scutum Nano Solutions GmbH Europe

Street/POB-No.: Albertgasse 39/15

Postal Code, city: 1080 Wien

Austria

WWW: www.scutumnano.com

E-mail: office@scutumnano.com

Telephone: +43 1 96 19 74

Dept. responsible for information:

Thomas Gombas

Telephone: +43 1 96 19 74, E-mail: thomas.gombas@scutumnano.com

1.4 Emergency telephone number

**GIZ-Nord, Göttingen, Germany,
Telephone: +49 551-19240**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (CLP)

Hazard statements: H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: P273 Avoid release to the environment.

Special labelling

Text for labelling: Contains: Silver, nanomaterial <0.025 g/100 g
Product-type 2: Disinfectants and algacides not intended for direct application to humans or animals
Product-type 4: Food and feed area
Product-type 9: Fibre, leather, rubber and polymerised materials preservatives
Use biocides safely. Always read the label and product information before use.

2.3 Other hazards

Larger quantities: May be harmful if inhaled.

Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Aqueous solution

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 231-131-3 CAS 7440-22-4	Silver, nanomaterial	< 0.025 %	Aquatic Acute 1; H400. Aquatic Chronic 1; H410.

Full text of H- and EUH-statements: see section 16.

Additional information: Contains Titanium dioxide: The maximum workplace exposure limits are, where necessary, listed in section 8.

Information about Silver, nanomaterial:

M-factor acute: 1,000

M-factor chronic: 100

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth. Never give an unconscious person anything through the mouth. In the event of discomfort seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

The product itself does not burn. Extinguishing is to be in accordance with the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Fires in the immediate vicinity may cause the development of dangerous vapours.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Hazchem-Code: -

Cool endangered containers with water jetspray. Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe vapours or spray mist. In case of handling larger quantities: Wear appropriate protective equipment.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapours or spray mist. In case of handling larger quantities: Wear appropriate protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Store container tightly closed in a dry and cool place. Protect from heat and direct sunlight.
Storage temperature: 5 °C - 40 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
13463-67-7	Titanium dioxide	Great Britain: WEL-TWA	10 mg/m ³ (inhalable fraction)
		Great Britain: WEL-TWA	4 mg/m ³ (respirable fraction)
		Ireland: 8 hours	10 mg/m ³ (inhalable fraction)
		Ireland: 8 hours	4 mg/m ³ (respirable fraction)
7440-22-4	Silver, nanomaterial	Europe: IOELV: TWA	0.1 mg/m ³ (metal)
		Great Britain: WEL-TWA	0.1 mg/m ³ (metal)
		Ireland: 8 hours	0.1 mg/m ³

DNEL/DMEL: Information about Silver:
 DNEL workers, systemic, long-term, inhalative: 0.1 mg/m³
 DNEL consumers, systemic, long-term, inhalative: 0.04 mg/m³
 DNEL consumers, systemic, long-term, oral: 1.2 mg/kg bw/d

PNEC: Information about Silver:
 PNEC Water (freshwater): 0.04 µg/L
 PNEC Water (marine water): 0.86 µg/L
 PNEC sewage treatment plant: 0.025 mg/L
 PNEC sediment (freshwater): 438.13 mg/kg dw
 PNEC sediment (marine water): 438.13 mg/kg dw
 PNEC soil: 1.41 mg/kg dw

8.2 Exposure controls

Provide adequate ventilation, and local exhaust as needed.

Personal protection equipment

Occupational exposure controls

Respiratory protection: With correct and proper use, and under normal conditions, breathing protection is not required. In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Although not required under normal conditions, we recommend precautionally the use of protective gloves. Recommendation: protective gloves according to EN 374. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Although not required under normal conditions, we recommend the use of suitable protection goggles.

Body protection: Although not required under normal conditions, we recommend the use of light protective clothing.

General protection and hygiene measures:
 Do not breathe vapours or spray mist. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product.
 In case of handling larger quantities: Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Colour: yellowish
Odour:	No data available
Odour threshold:	No data available
pH value:	7.5 - 9.5
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	100 °C
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	30.7 hPa
Vapour density:	<= 1.0
Density:	1.0 - 1.1 g/mL
Water solubility:	easily soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing characteristics:	No data available

9.2 Other information

Additional information: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

refer to 10.3

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat. Protect from frost.

10.5 Incompatible materials

Acids

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD50 Rat, oral: > 5000 mg/kg (TN-050)

Toxicological effects: Acute toxicity (oral): Based on available data, the classification criteria are not met.
Acute toxicity (dermal): Based on available data, the classification criteria are not met.
Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
Skin corrosion/irritation: Lack of data.
Serious eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

Information about Silver:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 1.2 µg/L/96h

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 0.22 µg/L/48h

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 16 10 02 = aqueous liquid wastes other than those mentioned in 16 10 01

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Marine pollutant:

no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

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

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code: -
No data available

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

H412 = Harmful to aquatic life with long lasting effects.

Reason of change: Changes in section 8: Personal Protective Equipment
Changes in section 11: Toxicological information
General revision

Date of first version: 26/6/2018

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

