Safety Data Sheet
TYTIN (liquid)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Substance name : TYTIN (liquid)
EC no : 231-106-7
CAS No : 7439-97-6
REACH registration No : 01-2119548380-42

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

Relevant identified uses

Main use category : Professional use
Function or use category : Dental materials.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T 00-800-41-050-505
E-mail: safety@kerrhawe.com

Manufacturer
Kerr Corporation
1717 West Collins Avenue
92867 Orange – CALIFORNIA (U.S.A.)
T 00-800-41-050-505
safety@kerrhawe.com

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Acute Tox. 2 (Inhalation:gas)	H330
Repr. 1B	H360D
STOT RE 1	H372
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of hazard classes and H-statements : see section 16

Safety Data Sheet
TYTIN (powder)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : TYTIN (powder)

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

Relevant identified uses

Main use category : Professional use

Function or use category : Dental materials.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T 00-800-41-050-505
E-mail: safety@kerrhawe.com

Manufacturer
Kerr Corporation
1717 West Collins Avenue
92867 Orange – CALIFORNIA (U.S.A.)
T 00-800-41-050-505
safety@kerrhawe.com

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Aquatic Acute 1 H400

Aquatic Chronic 2 H411

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Alloy. According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Silver	(CAS No) 7440-22-4 (EC no) 231-131-3 (REACH-no) 01-2119555669-21	30 - 60	Not classified
Tin	(CAS No) 7440-31-5 (EC no) 231-141-8 (REACH-no) 01-2119486474-28	10 - 30	Not classified
Copper	(CAS No) 7440-50-8 (EC no) 231-159-6 (REACH-no) 01-2119480154-42	10 - 20	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

First-aid measures after ingestion : Rinse nose, mouth and throat with water. Drink plenty of water. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO2) and powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation, especially in confined areas. Avoid all eye and skin contact and do not breathe vapour and mist.

For non-emergency personnel

Protective equipment : Wear appropriate personal protective equipment - see Section 8.

For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. Minimize generation of dust. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust, fume, vapours. Avoid dust formation. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Keep only in original container. Store in a dry place.

Incompatible materials : Halogens. Nitric acid.

7.3. Specific end use(s)

No additional data. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Tin (7440-31-5)		
United Kingdom	Local name	Tin
United Kingdom	WEL TWA (mg/m³)	2 mg/m³ compounds, inorganic, except SnH4, (as Sn4) 0.1 mg/m³ compounds, organic, except Cyhexatin (ISO), (as Sn)
United Kingdom	WEL STEL (mg/m³)	4 mg/m³ compounds, inorganic, except SnH4, (as Sn4) 0.2 mg/m³ compounds, organic, except Cyhexatin (ISO), (as Sn)

Copper (7440-50-8)		
United Kingdom	Local name	Copper
United Kingdom	WEL TWA (mg/m³)	0.2 mg/m³ fume (as Cu) 0.2 mg/m³ fume (as Cu) 1 mg/m³ and compounds, dusts and mists (as Cu)
United Kingdom	WEL STEL (mg/m³)	2 mg/m³ and compounds, dusts and mists (as Cu)

Silver (7440-22-4)		
United Kingdom	Local name	Silver, metallic
United Kingdom	WEL TWA (mg/m³)	0.1 mg/m³ 0.01 mg/m³ soluble compounds as Ag 0.1 mg/m³ metallic

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Safety glasses.

Hand protection : In case of repeated or prolonged contact wear gloves. PVC gloves. Layer thickness : 0,1 mm. Breakthrough time : > 60 minutes. STANDARD EN 374.

Eye protection : Use splash goggles when eye contact due to splashing is possible. STANDARD EN 166.

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Dust production: dust mask with filter type P2. STANDARD EN 149.

Environmental exposure controls : Avoid release to the environment.

Other information : Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Silver. Grey. Black.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not self-igniting
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Material insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: No data available

9.2. Other information

Additional information : None to our knowledge.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No polymerization.

10.4. Conditions to avoid

None to our knowledge.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Not classified

Silver (7440-22-4)	
LD50 oral rat	> 2000 mg/kg
LD50 oral	> 10000 mg/kg Mouse

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

Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Tin (7440-31-5)	
LC50 fish 1	0.42 mg/l (96 hours)
LC50 other aquatic organisms 1	1.5 mg/l (48 hours - Daphnia magna)
IC50 algae	5 mg/l

Copper (7440-50-8)	
LC50 fish 1	0.017 mg/l (96 hours - Rainbow trout)
EC50 Daphnia 1	0.0065 mg/l (48 hours -Daphnia hyalina

Silver (7440-22-4)	
LC50 fish 1	0.0062 mg/l (96 hours - Rainbow trout)
EC50 Daphnia 1	0.0006 mg/l (48 hours - Daphnia magna)

12.2. Persistence and degradability

TYTIN (powder)	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

TYTIN (powder)	
Bioaccumulative potential	No data.

Tin (7440-31-5)	
Bioconcentration factor (BCF REACH)	800000

Copper (7440-50-8)	
Bioconcentration factor (BCF REACH)	29

Silver (7440-22-4)	
Bioconcentration factor (BCF REACH)	3300

12.4. Mobility in soil

TYTIN (powder)	
Ecology - soil	Material insoluble in water.

12.5. Results of PBT and vPvB assessment

TYTIN (powder)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Regional legislation (waste)	:	Product is not hazardous waste.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code	:	18 01 10* - amalgam waste from dental care

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
Not regulated for transport
14.2. UN proper shipping name

14.3. Transport hazard class(es)
14.4. Packing group
14.5. Environmental hazards
No supplementary information available

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

1.3	Supplier, furnisher	Modified	

Data sources	:	EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.
Date of issue	:	26/05/2009
Revision date	:	23/12/2016
Supersedes	:	12/11/2015
Date of total revision	:	23/12/2016
Version	:	3.1
Signature	:	A. Åsebø Murel

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS06 GHS08 GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H330 - Fatal if inhaled
H360D - May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P201 - Obtain special instructions before use
P260 - Do not breathe spray, vapours, gas, fume, mist
P264 - Wash hands thoroughly after handling
P273 - Avoid release to the environment
P280 - Wear protective gloves
P284 - Wear respiratory protection
P308+P313 - IF exposed or concerned: Get medical advice/attention
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P310 - Immediately call a POISON CENTER or doctor/physician
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/container to a hazardous or special waste collection point

Extra phrases : The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1272/2008, article 1, paragraph 5d).

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name : TYTIN (liquid)

CAS No : 7439-97-6

EC no : 231-106-7

Name	Product identifier	%
mercury	(CAS No) 7439-97-6 (EC no) 231-106-7 (EC index no) 080-001-00-0 (REACH-no) 01-2119548380-42	=>40-<45

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.

Symptoms/injuries after inhalation : Fatal if inhaled.

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

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO2) and powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Vapours may be very hazardous to health.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

For non-emergency personnel

Protective equipment : See Heading 8.

For emergency responders

No additional information available

6.2. Environmental precautions

Discharging into rivers and drains is forbidden.

6.3. Methods and material for containment and cleaning up

For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container. Store in original container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials : Halogens. Nitric acid.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

Consult the supplier for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

mercury (7439-97-6)		
United Kingdom	Local name	Mercury
United Kingdom	WEL TWA (mg/m³)	0.02 mg/m³ and divalent inorganic compounds including mercuric oxide and mercuric chloride (measured as mercury)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Safety glasses.

Hand protection	:	Wear suitable gloves. Nitrile rubber gloves. Butyl rubber. Layer thickness : 0,09mm. Breakthrough time : >480 min. STANDARD EN 374.
Eye protection	:	Safety glasses. STANDARD EN 166.
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment. Combined gas/dust mask with filter type. ABEK- Hg/P3. Standard EN 143. EN 405

Other information	:	Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Grey. Silver.
Odour	:	none to slight.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	3.33 °C
Freezing point	:	No data available
Boiling point	:	356 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	0.0012 mm Hg @20°C
Relative vapour density at 20 °C	:	6.93 (Hg)
Relative density	:	No data available
Density	:	13.35 g/cm³
Solubility	:	Material insoluble in water. Water: 0.002 g/100ml
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Non flammable.
Explosive limits	:	No data available

9.2. Other information

Additional information	:	None to our knowledge.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No polymerization.

10.4. Conditions to avoid

No flames. Eliminate all sources of ignition.

10.5. Incompatible materials

Halogens. Nitric acid.

10.6. Hazardous decomposition products

No decomposition if stored and used normally.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Inhalation:gas: Fatal if inhaled.

Skin corrosion/irritation : Not classified
Contact during a long period may cause light irritation

Serious eye damage/irritation : Not classified
Contact during a long period may cause light irritation

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage the unborn child.

STOT-single exposure : Not classified
May cause respiratory irritation

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

mercury (7439-97-6)	
LC50 fish 1	0.0078 mg/l (96 hours - Salmo salar)
EC50 Daphnia 1	0.014 mg/l (48 hours - Daphnia magna)
LC50 other aquatic organisms 2	0.006 mg/l (48 hours - Daphnia magna)

12.2. Persistence and degradability

TYTIN (liquid) (7439-97-6)	
Persistence and degradability	No data available.

mercury (7439-97-6)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

TYTIN (liquid) (7439-97-6)	
Bioaccumulative potential	Contains bioaccumulative component(s).

mercury (7439-97-6)	
Bioconcentration factor (BCF REACH)	63000

12.4. Mobility in soil

TYTIN (liquid) (7439-97-6)	
Ecology - soil	Insoluble.

12.5. Results of PBT and vPvB assessment

TYTIN (liquid) (7439-97-6)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

Additional information : No other effects known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Regional legislation (waste) : Dispose as hazardous waste.

Waste treatment methods : Recover the product with absorbent material. Dispose of contents/container in accordance with licensed collector's sorting instructions.

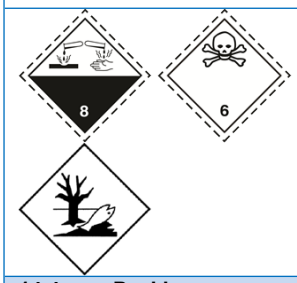
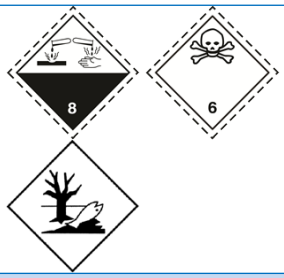
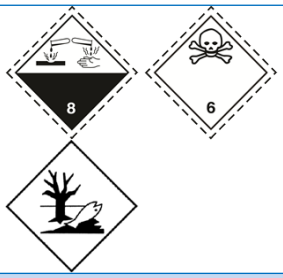
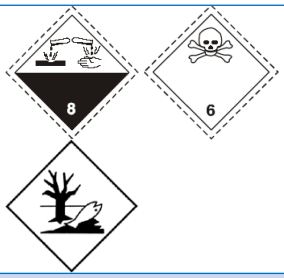
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 06 04 04* - wastes containing mercury

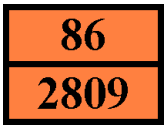
SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
2809	2809	2809	2809
14.2. UN proper shipping name			
MERCURY	MERCURY	Mercury	MERCURY
Transport document description			
UN 2809 MERCURY (mercury(7439-97-6)), 8 (6.1), III, (E), ENVIRONMENTALLY HAZARDOUS	UN 2809 MERCURY, 8 (6.1), III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS		
14.3. Transport hazard class(es)			
8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available			

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	:	CT1
Special provisions (ADR)	:	365
Limited quantities (ADR)	:	5kg
Excepted quantities (ADR)	:	E0
Packing instructions (ADR)	:	P800
Mixed packing provisions (ADR)	:	MP15
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13, CV28
Hazard identification number (Kemler No.)	:	86
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X

- Transport by sea

Special provisions (IMDG)	:	365
Limited quantities (IMDG)	:	5 kg
Excepted quantities (IMDG)	:	E0
Packing instructions (IMDG)	:	P800
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	B
Stowage and segregation (IMDG)	:	Clear of living quarters. 'Away from' azides.

Properties and observations (IMDG)	:	A silvery metallic element occurring in the liquid state at normal temperatures. Relative Density: 13.546. Melting point:-39°C . Highly corrosive to aluminium. Toxic if swallowed, by skin contact or by inhalation. Special care should be taken if a leakage occurs during transport, especially when carried in breakable packages and in aluminium freight containers. Carriage should be prohibited in hovercraft and other ships constructed from aluminium.

- Air transport

PCA Excepted quantities (IATA)	:	E0
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	868
PCA max net quantity (IATA)	:	35kg
CAO packing instructions (IATA)	:	868
CAO max net quantity (IATA)	:	35kg
Special provisions (IATA)	:	A804
ERG code (IATA)	:	8L

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

No REACH Annex XVII restrictions

TYTIN (liquid) is not on the REACH Candidate List

TYTIN (liquid) is not on the REACH Annex XIV List

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: OTHER INFORMATION

Indication of changes:

1.3	Supplier, furnisher	Modified	

Date of issue	:	26/05/2009
Revision date	:	23/12/2016
Supersedes	:	12/11/2015
Date of total revision	:	23/12/2016
Version	:	3.1
Signature	:	A. Åsebø Murel

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H330	Fatal if inhaled
H360D	May damage the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.