

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 1 of 12

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

1.1. Product identifier

SENO 3211 Glanzzinn

Product code:

SENO 3211

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

Use of the substance/mixture

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	BESTCHEM GmbH	
Street:	Am Sportplatz 12 A	
Place:	D-63826 Geiselbach	
Telephone:	+49 (0) 6024 30 99 880	Telefax: +49 (0) 6024 30 99 887
e-mail:	info@bestchem.de	
Internet:	www.bestchem.de	

1.4. Emergency telephone number:

Medical Emergency information in case of poisoning: Poison Information Center
Mainz – 24h – Phone: +49 6131 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Germ cell mutagenicity: Muta. 2

Carcinogenicity: Carc. 2

Reproductive toxicity: Repr. 2

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Suspected of causing cancer.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Tartaric acid

thiocarbamide, thiourea

Tin chloride dihydrate

Signal word: Danger

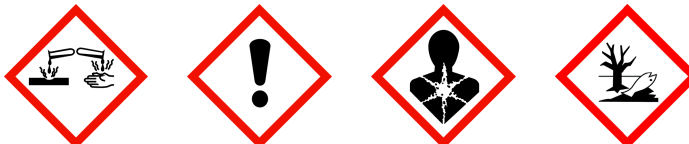
Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 2 of 12

Pictograms:

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P391	Collect spillage.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
87-69-4	Tartaric acid			25 - 50 %
	201-766-0		01-2119537204-47	
	Eye Dam. 1; H318			
62-56-6	thiocarbamide, thiourea			25 - < 30 %
	200-543-5	612-082-00-0	01-2119977062-37	
	Carc. 2, Repr. 2, Acute Tox. 4, Aquatic Chronic 2; H351 H361d H302 H411			
10025-69-1	Tin chloride dihydrate			15 - < 20 %
	231-868-0		01-2119971277-28	
	Muta. 2, Repr. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H341 H361 H332 H315 H319 H317 H335 H373 H400 H410			

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 3 of 12

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
87-69-4	201-766-0	Tartaric acid	25 - 50 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
62-56-6	200-543-5	thiocarbamide, thiourea	25 - < 30 %
		dermal: LD50 = 2800 mg/kg; oral: LD50 = 1750 mg/kg	
10025-69-1	231-868-0	Tin chloride dihydrate	15 - < 20 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 2274 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Call a doctor if you feel unwell. If unconscious place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice. If breathing is irregular or stopped, administer artificial respiration. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. Unsuitable material: Solvent/Thinner.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Keep at rest. Immediately call a doctor.

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

No information 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

alcohol resistant foam. Carbon dioxide (CO₂). Powder. Water spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of: Hazardous decomposition products

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 4 of 12

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothes. Do not breathe dust. When using do not eat, drink or smoke. Wear personal protection equipment. Remove all sources of ignition.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Never use pressure to empty container. Store in a place accessible by authorized persons only. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)". Keep/Store only in original container.

Hints on joint storage

Do not store together with: acid. Alkalis (alkalis). Oxidizing agents.

Keep away from heat. Protect against direct sunlight.

Further information on storage conditions

storage temperature: 15°C - 30°C

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Tin compounds, inorganic, except SnH ₄ , (as Sn)	-	2		TWA (8 h)	WEL
		-	4		STEL (15 min)	WEL

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 5 of 12

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
87-69-4	Tartaric acid		
Consumer DNEL, long-term	oral	systemic	8,1 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	1,5 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	2,9 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,3 mg/m ³
Worker DNEL, long-term	inhalation	systemic	5,2 mg/m ³
62-56-6	thiocarbamide, thiourea		
Worker DNEL, long-term	dermal	systemic	3,4 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,1 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	1,7 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,2 mg/m ³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
87-69-4	Tartaric acid	
Freshwater	0,3125 mg/l	
Freshwater (intermittent releases)	0,514 mg/l	
Marine water	0,3125 mg/l	
Freshwater sediment	1,141 mg/kg	
Marine sediment	1,141 mg/kg	
Micro-organisms in sewage treatment plants (STP)	10 mg/l	
62-56-6	thiocarbamide, thiourea	
Freshwater	0,01 mg/l	
Marine water	0,001 mg/l	
Freshwater sediment	0,0725 mg/kg	
Marine sediment	0,0072 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,38 mg/kg	
Soil	2,725 mg/kg	

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 6 of 12

Eye/face protection

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. EN 374

Suitable material: NBR (Nitrile rubber)

Thickness of glove material: > 0,4 mm

Breakthrough time (maximum wearing time) > 480 min

Skin protection

Wear suitable protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (BGR 190)

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	
Odour:	characteristic

Test method

pH-Value:	not determined
-----------	----------------

Changes in the physical state

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable

Explosive properties

No information available.

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Decomposition temperature:	not determined
----------------------------	----------------

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
------------------	----------------

Density (at 21 °C):	1,586 g/cm ³ DIN 53217
---------------------	-----------------------------------

Water solubility:	easily soluble
-------------------	----------------

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 7 of 12

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

not determined

Viscosity / dynamic:

not determined

Viscosity / kinematic:

not determined

Relative vapour density:

not determined

Evaporation rate:

not determined

Solvent separation test:

< 3% ADR/RID

Solvent content:

0%

9.2. Other information

Solid content:

100 %

Odour threshold: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Strong acid, Base, Oxidizing agents, strong.

10.4. Conditions to avoid

Keep away from heat. Protect against direct sunlight.

10.5. Incompatible materials

Strong acid, Base, Oxidizing agents, strong.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 8 of 12

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
87-69-4	Tartaric acid				
	oral	LD50 > 2000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2000 mg/kg	Rabbit	Manufacturer	
62-56-6	thiocarbamide, thiourea				
	oral	LD50 1750 mg/kg	Rat	Manufacturer	
	dermal	LD50 2800 mg/kg	Rabbit	Manufacturer	
10025-69-1	Tin chloride dihydrate				
	oral	LD50 2274 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

- Causes skin irritation.
- Causes serious eye damage.

Sensitising effects

- May cause an allergic skin reaction. (Tin chloride dihydrate)

Carcinogenic/mutagenic/toxic effects for reproduction

- Suspected of causing genetic defects. (Tin chloride dihydrate)
- Suspected of causing cancer. (thiocarbamide, thiourea)
- Suspected of damaging fertility. Suspected of damaging the unborn child.

STOT-single exposure

- Based on available data, the classification criteria are not met.

STOT-repeated exposure

- May cause damage to organs through prolonged or repeated exposure. (Tin chloride dihydrate)

Aspiration hazard

- Based on available data, the classification criteria are not met.

Additional information on tests

- The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 9 of 12

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
87-69-4	Tartaric acid					
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Brachydanio rerio (zebra-fish)	Manufacturer OECD 203
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	Manufacturer OECD 202
62-56-6	thiocarbamide, thiourea					
	Acute fish toxicity	LC50 mg/l	> 10	96 h	Leuciscus idus (golden orfe)	Manufacturer
	Acute crustacea toxicity	EC50	110 mg/l	48 h	Daphnia magna	Manufacturer

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
87-69-4	Tartaric acid				
	OECD 306	85 %	28		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
87-69-4	Tartaric acid	-0,76
62-56-6	thiocarbamide, thiourea	-1,05

12.4. Mobility in soil

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

060313 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of salts and their solutions and metallic oxides; solid salts and solutions containing heavy metals; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Safety Data Sheet

according to Regulation (EC) No 1907/2006


SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 10 of 12

Land transport (ADR/RID)


14.1. UN number: UN 3077
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiocarbamide, thiourea, Tin chloride dihydrate)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9



Classification code: M7
Special Provisions: 274 335 375 601
Limited quantity: 5 kg
Excepted quantity: E1
Transport category: 3
Hazard No: 90
Tunnel restriction code: -

Inland waterways transport (ADN)


14.1. UN number: UN 3077
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiocarbamide, thiourea, Tin chloride dihydrate)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9



Classification code: M7
Special Provisions: 274 335 375 601
Limited quantity: 5 kg
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3077
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiocarbamide, thiourea, Tin chloride dihydrate)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9



Special Provisions: 274, 335, 966, 967, 969
Limited quantity: 5 kg
Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3077

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 11 of 12

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(thiocarbamide, thiourea, Tin chloride dihydrate)

14.3. Transport hazard class(es): 9

14.4. Packing group: III

Hazard label: 9



Special Provisions: A97 A158 A179 A197
 Limited quantity Passenger: 30 kg G
 Passenger LQ: Y956
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 956
 IATA-max. quantity - Passenger: 400 kg
 IATA-packing instructions - Cargo: 956
 IATA-max. quantity - Cargo: 400 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: thiocarbamide, thiourea, Tin chloride dihydrate

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol 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 regulatory information

Information according to 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s):
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SENO 3211 Glanzzinn

Revision date: 11.03.2021

Page 12 of 12

IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Muta. 2; H341	Calculation method
Carc. 2; H351	Calculation method
Repr. 2; H361fd	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)