

1. Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Product name: Cesium chloride
CAS-No.: 7647-17-8
EC-No.: 231-600-2

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

Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

1.4 Emergency Phone: +49 9287 881-174 (during office hours)

Fax: +49 9287 881-505

E-mail Address: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Repr. 2 H361 Suspected of damaging fertility or the unborn child

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms:



Signalword: Attention

Hazard statements: H361 Suspected of damaging fertility or the unborn child

Precautionary statements: P280 Wear protective gloves/protective clothing/eye protection/face protection; P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Additional information: none

2.3 Other hazards

All chemicals are potentially dangerous. Therefore they are to be handled exclusively by specially trained personnel and with the necessary care.

Results of PBT- und vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition / information on ingredients

3.1 Chemical characterization:

Substances

CAS-No. Description: 7647-17-8 Cesium chloride

Identification number(s):

EC number: 231-600-2

Formula: CsCl

Molar mass [g/mol]: 168.4

4. First aid measures

4.1 Description of first aid measures

General information: In case of discomfort consult a physician and show this safety data sheet to the physician in attendance.
Remove contaminated clothes.

After inhalation: Ensure ample supply of fresh air and consult a physician.

After skin contact: Wash off with plenty of water and soap. In case of persisting skin irritation consult a physician.

After eye contact: Keep eye with both hands wide open and rinse for at least 15 minutes under running water. Immediately consult an eye specialist.

After swallowing: Rinse mouth and consult a physician. Do not introduce anything into the mouth of an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Discomfort

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: Water spray, carbon dioxide, extinguishing powder or foam.

For safety reasons unsuitable extinguishing agents: Full jet of water.

5.2 Special hazards arising from the substance or mixture

The product itself is not combustible.

In case of fire, the following can be released:

Hydrogen chloride, cesium oxide

5.3 Advice for firefighters

Protective equipment: In case of fire wear self-contained respiratory apparatus.

Additional information: Collect contaminated extinguishing water separately.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.
Do not breathe dusts. Wear personal protective clothing.

6.2 Environmental precautions

Do not release into sewers / ground water or soil.

6.3 Methods and material for containment and cleaning up

Pick up mechanically. Avoid dust formation.
Dispose contaminated material as described in Section 13. Ensure sufficient ventilation.

6.4 Reference to other sections

Information for safe handling is available in Section 7.
Information concerning personal protective equipment can be read through in Section 8.
Appropriate disposal is described in Section 13.

7. Handling and storage

7.1 Precautions for safe handling

In case of dust formation ensure appropriate ventilation / exhaustion at the workplace. Keep containers, equipment and working place clean.

Information about fire and explosion protection:

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for safe storage,
including any incompatibilities: Storage category 13; non-flammable solids.

Information about storage in one
common storage facility: Store away from foodstuffs.

Further information about
storage conditions:
Keep the container tightly closed.
Store in a dry area. Product is hygroscopic.

Recommended storage
temperature: 15 - 25 °C

7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls / personal protection

Additional information about
design of technical facilities: No additional data; refer to Section 7.

8.1 Control parameters

Ingredients with limit
values that require
monitoring at the workplace: none ; Comply with dust emission limits.

Additional information: As a basis serve valid lists at the creation date.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The product should be handled with the usual care as necessary for chemicals.
Avoid eye and skin contact.
Do not breathe dust.
Wash hands before breaks and at the end of work.

Individual protection measures:

Body protection is to be selected depending on the concentration and quantity of hazardous substances on the individual workplace. The chemical resistance of body protection has to be clarified with the supplier.

Respiratory protection:

Necessary in case of dust formation: filter P2.

Protection of hands:

Protection gloves. When selecting the glove material pay attention to breakthrough time, permeation rate and degradation.
Material: nitrile rubber.

Eye protection:

Tightly sealed goggles.

Body protection:

Protective work clothing.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

<u>Appearance</u> Form: Colour:	Powder White
Odour:	Odourless
Odour threshold:	No data available.
pH-value:	6 - 7.5
<u>Change in condition</u> Melting point / Melting range: Boiling point / Boiling range:	approx. 646°C approx. 1303°C
Flash point:	Not flammable.
Flammability (solid, gaseous):	Not flammable.
Ignition temperature:	Not flammable.
Decomposition temperature:	No data available.
Self-igniting:	Not flammable.
Danger of explosion:	No danger of explosion.
<u>Explosion limits</u> Lower: Upper:	Not relevant. Not relevant.
Oxidizing properties:	No data available.
Vapour pressure:	No data available.
Density at 20°C:	3.988 g/cm ³
Relative density:	2000 kg/m ³
Vapour density:	No data available.
Evaporation rate:	No data available.
Solubility in / Miscibility with water:	1900 g/l at 20°C.
Partition coefficient (n-octanol / water):	No data available.
<u>Viscosity</u> Dynamic: Kinematic:	No data available. No data available.

9.2 Other information

No further data available.

10. Stability and reactivity

10.1 Reactivity

Under normal ambient conditions the substance is not reactive.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

When handled and stored properly the substance does not decompose.

10.3 Possibility of hazardous reactions

Exothermic reaction with oxidants.

10.4 Conditions to avoid

Moisture.

10.5 Incompatible materials

Strong oxidants, strong acids.

10.6 Hazardous decomposition products

In case of fire refer to Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD / LC50 values relevant
for classification:

Oral | LD50 | 2600 mg/kg (rat)

Potential health effects

Skin:	Frequently or prolonged contact with skin may cause dermal irritation.
Eyes:	Slight to moderate irritant effect.
Inhalation:	No data available.
Ingestion	No data available.
Sensitization:	No data available.

CMR effects

Germ cell mutagenicity:	No significant effects or critical hazards known.
Carcinogenicity:	No significant effects or critical hazards known.
Reproductive toxicity:	Suspected to damage fertility or the unborn child.

Aspiration hazard:

No data available.

Specific target organ toxicity – single exposure:

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information:

At a low exposition: discomfort

Further information:

Further hazardous properties can not be excluded.
The product should be handled with the usual care as necessary for chemicals.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

No water hazard.

Daphnia toxicity	
EC50	37.4 mg/l/48h (aquatic invertebrates) (ECHA) 134.3 mg/l/72 h (pseudokirchneriella subcabiata)
LC50	>100 mg/l/96h (zebrafish/ danio rerio)

12.2 Persistence and degradability

Persistence: Not applicable.

Degradability: Not applicable.

12.3 Bioaccumulative potential

Does not accumulate considerably in organisms.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects

Remark: Do not allow to enter waters, waste water, or soil.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations.
Waste codes are to be assigned by the operator according to the respective application of the product.
Waste is to be classified as hazardous.

Uncleaned packaging

Recommendation: Disposal same as for unused product.

14. Transport information

	ADR	IMDG	IATA
14.1 UN-Number	none	none	none
14.2 UN proper shipping name	none	none	none
14.3 Transport hazard class(es) / -label			
14.4 Packing group:	none	none	none
Transport hazard class(es):	none	none	none
Label:	none	none	none
Danger symbol:			
14.5 Environmental hazards:	No	No	No

14.6 Special precautions for user

Not applicable.

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

The cargo is not intended to be carried in bulk.

15. Regulatory information

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

National regulations:

Information about limitation of use: Legal provisions such as Chemicals Act, Maternity Protection Act, Young Persons Employment Act or Home Work Act are to be observed!

Waterhazard class: WHC 1, slightly water-polluting

Classification according to appendix 3, administrative regulation for water-polluting substances (VwVwS).

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other Information

Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

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