






1 Identification of the substance/mixture and the company

1.1	Product identifier	LegioCid-A®
1.2	Use of substance	Oxidant
1.3	Supplier	TCDO Produktionsgesellschaft mbH Carola-Blome-Str. 7 A-5020 Salzburg Tel: +43 662 434342-0 Fax: +43 662 434342-3
	Contact	Mr. G. Weiss Email: office@wapotec.at
1.4	Emergency phone	+43 662 434342-0 Office hours: MO - TH: 8.00 - 16.00 FR: 8.00 - 12.00

2 Hazards identification

- 2.1 Hazard classification of substance or mixture
-  according to Directive (EC) N° 1272/2008
Not app.
The product is not classified hazardous.
- The mixture is not classified hazardous according to the according to Directive 1999/45/EC.
-  According to Regulation CE 1999/45/EG
Not app.
The product is not classified hazardous.
- 2.2 Label elements
-  according to Regulation (EC) 1272/2008
Not app.
According to Directive (EC) N° 1272/2008 the product does not require hazard labeling
-  According to Regulation CE 1999/45/EG
Not app.
According to Directive 1999/45/EC the product does not require hazard labeling
-  Special hazard identification components for labeling
Not app.
- 2.3 Other hazard information
- Can form chlorine dioxide upon contact with concentrated acids

3 Composition/information on ingredients

3.2 Mixtures

Description

Tetrachlorodecaoxide complex (TCDO-Anion), water solution

ELINCS-No. 420-970-2

Registration-No. 01-0000016753-67-0001

Dangerous ingredients

None.

4 First-aid measures

4.1 Description of first-aid measures

Consult a physician if you feel unwell.

No administration when unconscious or seizing

Remove immediately all contaminated clothing.

Clothing contaminated with product shall be washed immediately

After inhalation

Usually no impacts.

Move affected person immediately to fresh air. Consult a physician if feeling unwell.

Upon unconsciousness transport and rest in recovery position.

After skin contact

After skin contact, wash with plenty of water and soap.

Remove immediately all contaminated clothing.

Consult physician if skin irritation occur.

After eye contact

Flush immediately with running water for at least 10 to 15 minutes, lifting lids. Consult a physician upon eye irritation.

After swallowing

Rinse mouth with cold water.

As first aid administer (100 – 150 ml) solution of ascorbic acid (1-2 %) is recommended.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of immediate medical attention and special treatment needed

Depending on patient's condition, symptoms and general condition should be evaluated by a physician.

5 Fire-fighting measures

5.1 Extinguishing media

☉ Suitable extinguishing media

The product is not flammable. Adapt extinguishing media to surrounding area.

☉ Unsuitable extinguishing media for safety reasons

5.2 Special hazards arising from the substances or mixture.

Not known.

5.3 Special protective actions for fire-fighters

Special protective equipment: Wear full protective clothing and self-contained breathing apparatus.



6 Accidental release of material

6.1 Personal precautions, protective equipment and suitable emergency procedures.

Restricted access to affected area during cleaning. Wear full protective clothing. Make sure enough air conditioning. Avoid contact to substance.

6.2 Environmental precautions

Do not empty undiluted into canalization/surface water/ground water.

6.3 Methods and material for retention and cleaning up.

Dilute with plenty of water and dispose off as sewage (unless unsuitable due to chemical/technical reasons or provisions), high assimilative capacity

6.4 Reference to other clauses

Protection measurements see point 8

Disposal see point 13



7 Handling and storage

7.1 Precautions for safe handling

No special measures or precautions necessary for handling, storage, transport or in case of fire with solutions water diluted till 10 g TCDO/l max. or higher (1:100 bis 1:1000).

7.2 Conditions for safe storage including any incompatibilities

☉ Fire and explosion protection measures

No special measures required – do not smoke.

☉ Design of storage rooms and container

No special requirements for storage rooms.

Do not keep the original container sealed.

Do not store with acids and chloride products.

☉ Material incompatibility

Material incompatibility

Recommended storage temperature +5 to +35 °C, protect from sunlight

VbF class Not app.

7.3 Specific end uses

Oxidant.

8 Exposure controls/personal protection

8.1 Control parameters

The product does not contain relevant quantities of substances with components to be controlled according to limit values at work.

8.2 Exposure controls

General protective and hygiene measures

Follow usual precautions when dealing with chemicals. Keep away from food, drink and fodder. Do not eat or drink at work, wash hands before breaks and end of work. Avoid eye and skin contact.

Respiratory protection

Not required.

Hand protection

Nicht erforderlich.

Eye protection

Sealed safety glasses.





Personal protection

Protective clothing

9 Physical and chemical properties

9.1 Information on basic physically and chemically properties.

Appearance	liquid
Colour	greenish to transparent
Ordeur	Characteristic, not unpleasant
pH	appr. 8,2 – 8,4
Melting point	-11 °C
Boiling point / boiling range	102,6 °C
Flash point	n. a.
Self-ignitability	n.a., agent existing in water solution only
Explosive properties	Non-explosive
Surface tension	79,5 ± 0,31 Nm / 19,7 °C

	Vapour pressure (50 °C)	298 K / 2,7 kPa
	Density at 20°C	1,099 g/cm ³
	Water solubility at 20°C	Soluble, user-defined mixable
	Viscosity at 20°C	1,1 mPas

9.2 Further information

None.

**10 Stability and reactivity**

10.1 Reactivity

No hazardous reactions when used when used for intended uses.

10.2 Chemical stability

Solid when used when used for intended uses.

10.3 Possibility of hazardous reactions

Upon contact with acids chlorine dioxide can be formed.

10.4 Conditions to avoid

Do not expose high temperatures to avoid decomposing.

10.5 Incompatible materials

Keep away from acids and other chlorine dioxides.

10.6 Hazardous decomposition products

Upon accidental contact or contamination with concentrated acids chlorine dioxide can be formed.

**11 Toxicological information**

11.1 Acute toxicity

TCDO:

LD₅₀ (Rat) 4,58ml/kg-LG (live weight) (24 hours)LD₅₀ (Rabbit) negative: 10% solution does not actuate conjunctival irritations after application.

Scale of point values: Etad-Sub-Committee for Toxicology

- classified non-irritant (LC₅₀(96h) > 1000 ppm)
- concentrated solution: very mild conjunctival irritations up to 24 hours after application.

 Primary irritations

Skin contact: irritant

Eye contact: irritant

 Sensitization

No sensitizing effects known.

 Cancerogenity

The product does not contain any ingredients at a concentration equal or higher than 0,1%,

being listed as carcinogen at the International Agency for Cancer Research (IARC) or the American Conference for Governmental Industrial Hygienic (ACGIH).

 Further information

No toxic effects on skin known (Ceratinocytes).

Classification of preparation according to CLP-Regulation (EC) 1272/2008 Annex VI or rather to Dangerous Preparations Directive 1999/45/EC.



12 Ecological information

12.1 Toxicity

No effect expected when diluting with plenty of water

 Aquatic toxicity

TCDO:

- Rainbow trout, non-toxic for fishes
- LC₅₀ (Daphnia magna): 1210 mg/l – non-toxic

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available for the product itself.

12.5 Results of PBT- and vPvB-assessment

No data available.

12.6 Other adverse effects

Do not empty undiluted into ground water, in waters or in canalization



13 Disposal considerations

13.1 Waste treatment methods

Dilute with plenty of water and dispose off as sewage (unless unsuitable due to chemical/technical reasons or provisions)

 Waste code number

Not applicable.

 Waste name

Not applicable.

 European waste catalogue

Notice: EWC-waste key depends on origin. The decision is up to the last user.

 Contaminated packaging

Recommendation: Empty container completely and deliver to a specialized company for reconditioning, recycling or disposal.



14 Transport information

No dangerous good according to regulation for transport of dangerous goods

14.1 UN-number

Not applicable.

14.2 Proper UN-shipping name

Not applicable.

14.3 Transport hazard class

Not applicable.

14.4 Packaging group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

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

Not applicable.






15 Regulatory information

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

This safety data sheet complies with the Regulations (EC) Reach N° 1907/2006.
The alloy is classified according to Dangerous Preparations Directive (EC) 1999/45 and to regulation (EC)1272/2008 Annex I.

National regulatory:

Austria:

-  Labeling according to BGBl II 2000/81 ChemV 1999.
The product is not classified and does not require hazards identification.
-  ChemG 1996
This product is not classified hazardous according to the Austrian chemical legislation of 1996.
-  VbF - Directive about combustible liquids (BGBl 1991/240)
This product is not classified as combustible liquid.

Germany:

- ☉ Classification in water hazard classes according VwVwS dated 17.05.1999 (self assessment)
wp 2 (water pollutant)

15.2 Chemical safety assessment

The mixture is not subject to safety assessment.



16 Other information

Other information.

- ☉ Relevant R-Phrases

Not applicable.

- ☉ Relevant H-Phrases

Not applicable.

- ☉ Relevant hazard classification

Not applicable.

- ☉ Edition

Number 2

Modification to Directive (EC) 453/2010

- ☉ Written by

UmEnA GmbH

- ☉ Translated by

Wapotec GmbH

- ☉ Short cut

n. t. not tested

n. a. not applicable

