



Vital Oxide

SECTION 1: Identification of the mixture and of the company

1.1 Product identifier

Product name: **Vital Oxide**
UFI No: QFY9-52E7-F00K-K1TH

1.2 Relevant identified uses of the mixture and uses advised against

Use of the mixture: Disinfectant not intended for direct application to humans on animals.
Disinfectants for veterinary hygiene, food and feed area.

Use advised against: -

1.3 Details of the supplier of the safety data sheet

Name of the supplier: Tiarco Chemical Europe GmbH
Am Gut Baarking 12, 46395 Bocholt, Germany
Telephone: +49 2871 23476-0
Email: europeansales@trcc.com

1.4 Emergency telephone number

Company: +49 2871 23476-0 (from 8 a.m. and 5 p.m. on working days).
NHS UK: 111 (24h / 7d) – for professional only
Irish National Poison Centre: 01 809 2166

SECTION 2: Hazards identification

2.1 Classification of the mixture

Classification according to CLP Regulation (EC) No 1272/2008.
Aquatic chronic 3

2.2 Labelling elements

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

Pictograms: -

Signal words: -

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

Precautionary statements: P101 If medical advice is needed, have product container or label at hand.
P273 Avoid release to the environment.
P501 Dispose of contents/container according to local regulations.

2.3 Other hazards

None identified.



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SECTION 3: Composition and information on the ingredients

3.1 Substance

This product is a mixture.

3.2 Mixture

Name	CAS number	EC number	Classification	% composition
Sodium chlorite	7758-19-2	231-836-6	Met. Corr. 1, H290 Acute Tox. 4, H302 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	0.1 < C < 1
Alkyl (C12-18) dimethylbenzyl ammonium chloride (ADBAC (C12-18))	68391-01-5	269-919-4	Acute Tox. 4, H302 Skin corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic chronic 1, H410	0.1 < C < 1
Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14))	85409-23-0	287-090-7	Acute Tox. 4, H302 Skin corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic chronic 1, H410	0.1 < C < 1

Sodium chlorite is the precursor of the biocide active substance chlorine dioxide generated from sodium chlorite by oxidation. This mixture is in compliance with Regulation (EC) 528/2012 and Regulation (EC) 1907/2006.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid Measures

4.1 Description of first aid measures

General information: Get medical advice or attention if the victim feels unwell or is concerned.
After inhalation: Remove to fresh air.
After skin Contact: Rinse with water if any discomfort.
After eye contact: Rinse with water if any discomfort
After ingestion: Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of excessive quantities of vapours may cause dizziness.



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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: in case of fire, use water, foam, carbon dioxide or dry agent for extinction.
Unsuitable extinguishing media: none identified.

5.2 Special hazards arising from the mixture

In case of fire: do not breath fumes.
Decomposition products may include chlorine and chlorine dioxide.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Avoid firefighting effluents from entering sewers or waterways.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as per Section 8.
Avoid contact with eyes and skin. Do not inhale vapours.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwaters.

6.3 Methods and material for containment and cleaning up

Contain spillage using neutral absorbent material such as sand, earth, diatomaceous earth, vermiculite.
Sweep up or shovel. Place in sealed container and dispose according to local regulations.

6.4 Reference to other sections

See sections 7, 8, 12 and 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Wear protective clothing as per Section 8.
Avoid contact with eyes and skin. Avoid breathing vapours. Make sure that ventilation is adequate. Do not eat, drink or smoke when using this product. Wash hands after handling.

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7.2 Conditions for safe storage including any incompatibilities

Keep in original labelled tightly closed container. Store in a cool well-ventilated area (< 48 °C) away from direct sunlight. Keep from freezing.

Recommended packaging: same kind as original packaging.

Unsuitable packaging: avoid metallic unprotected packaging

Incompatibilities: do not store together with acids.

7.3 Specific end use(s)

Refer to section 1.2.

SECTION 8: Exposure Control/ Personal Protection

8.1 Control parameters

No identified Union and National Occupational Exposure limits in UK and Ireland known for substances in this mixture.

8.2 Exposure controls

8.2.1 Appropriate engineering control

Personal protective equipment:

Eye protection: Not required. Goggles (EN 166) recommended in case of transfer.

Hand protection: Not required. Gloves recommended (EN 374) in case of sensitive skin, intensive or prolonged contact.

Skin and body protection: Not required. Protective clothing recommended.

Respiratory hazard: Sufficient ventilation should be provided to avoid fumes build up. Wear respiratory equipment in case of intensive use or use in confined areas.

Thermal hazard: See sections 6 and 7.

Hygiene measures: When using, do not eat, drink or smoke.

Environmental exposure controls

Prevent product from entering sewage and drainage systems which lead to waterways.

SECTION 9: Chemical and Physical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Colourless liquid
Odour:	Mild
Odour threshold:	Not available
pH:	8 - 9
Melting point/freezing point:	Not available/0°C
Initial boiling point and boiling range:	100°C
Flash point:	Not applicable



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Evaporation rate:	Not available
Flammability:	Not available
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Relative density:	1.003 g/cm ³ (20°C)
Solubility:	Soluble in water
Partition Coefficient (n-octanol/water):	Not applicable
Auto-ignition temperature:	No information available
Decomposition temperature:	No information available
Viscosity:	No information available
Explosive properties:	No information available
Oxidising properties:	No information available

9.2 Other information

None identified.

SECTION 10: Stability and Reactivity

10.1 Reactivity

Under intended uses in section 1.2, normal handling and storage conditions, no dangerous reaction.

10.2 Chemical stability

Considered stable under normal handling and storage conditions recommended in section 7.

10.3 Possibility of hazardous reactions

Under handling and storage conditions recommended in section 7, no hazardous reaction.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Incompatible with acids.

10.6 Hazardous decomposition products

Under handling and storage conditions recommended in section 7, no hazardous decomposition products. See section 5 for combustion products.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity - oral
Acute oral toxicity up and down procedure in rats: LD ₅₀ > 5,000 mg/kg The classification criteria are not met.
Acute toxicity - dermal
Acute dermal toxicity study in rats - Limit Test: LD ₅₀ > 5,000 mg/kg The classification criteria are not met.
Acute toxicity - inhalation
Acute inhalation toxicity study in rats - Limit Test: LC ₅₀ > 2.09 mg/L The classification criteria are not met.
Skin corrosion/irritation
Acute dermal irritation in rabbits study: the mixture is not irritating to the skin.
Serious eye damage/irritation
Acute eye irritation in rabbits study: the mixture is not irritating to the eyes.
Respiratory or skin sensitisation
Dermal Sensitization Study in Guinea Pigs (Buehler Method): the mixture is not a skin sensitiser.
Germ cell mutagenicity
No evidence of mutagenic effects.
Carcinogenicity
No evidence of carcinogenic effects.
Reproductive toxicity
No evidence of reproductive effects.
Single STOT exposure
No information available.
Repeated STOT exposure
No information available.

SECTION 12: Ecological Information

12.1 Toxicity

No experimental test data available for the mixture. Based on available data, the product is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

No experimental test data available for the mixture.



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12.3 Bioaccumulative potential

No experimental test data available for the mixture.

12.4 Mobility in soil

Not applicable to mixtures.

12.5 Results of PBT and vPvB assessment

Not applicable to mixtures. Components do not fulfil criteria.

12.6 Other adverse effects

No information available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Unused packaging: Discard according to the local regulations. Do not discharge product in sewage and drainage systems which lead to waterways.
Contaminated packaging: Waste product and worn-out packages must be discarded according to the local regulations.

SECTION 14: Transport Information

The product is not classified as hazardous for transport.

14.1 UN number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class

Not applicable

14.4 Packing group

Not applicable

14.5 Environmentally hazardous

Not applicable

14.6 Special precautions for user

Not applicable



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14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory Information

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

This Safety Data Sheet is provided in compliance with REACH Regulation as amended by Regulation (EU) 2015/830. According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed in Annex XIV (SVHC) and Annex XVII of REACH regulation.

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

German Water Hazard Class (WGK): 2

15.2 Chemical safety assessment

A chemical safety assessment has not been performed.

SECTION 16: Other Information

Abbreviation explanations: PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent and Very Bioaccumulative
Met. Corr.: corrosive to metals
Acute Tox.: acute toxicity
Eye Dam.: eye damage
STOT: Specific Target Organ Toxicity
Skin corr.: skin corrosive

Full text of Hazard- and EU Hazard-statements:

- H290 May be corrosive to metals
- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H373 May cause damage to organs
- 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

Calculation based on experimental data and the hazards of the known components.
This safety data sheet is prepared in accordance with Regulation (EC) No 453/2010.



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This information is based on our current knowledge.

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. It does not however constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

Version: 6.0_EN

This safety data sheet replaces any previous version.

Changes is section 1.

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