



Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 26.03.2010

Revision: 26.03.2010

* 1 Identification of substance:

- **Product name:** Vario Chlorine Total - DPD F5, F10, F25 ml
- **Catalog number:**
00530129, 00530139, 530120, 530123, 530130, 530133, 00530089, 00530087, 530080(+83), 530085, 530150
- **Application of the substance / the preparation:** Reagent for water analysis
- **Supplier:**
Tintometer GmbH
Schleefstr. 8-12
DE-44287 Dortmund
Made in Germany
www.tintometer.de
phone: +49 (0) 231 945100
E-Mail: sales@tintometer.de
- **Informing department:**
e-mail: produktsicherheit@tintometer.de
Product Safety Department
- **Contact for technical details:**
Technical Department
e-mail: technik@tintometer.de
- **Emergency information:**
Poison Center Berlin, Germany
phone: +49(0)30 19240

* 2 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" (1999/45/EC) in the latest valid version.
- **GHS label elements**
Safety data sheet available on request.

* 3 Composition/information on ingredients

- **Description:** Mixture contains anorganic and organic compounds.

Dangerous components:

CAS: 6283-63-2	N,N-diethylbenzene-1,4-diammonium sulphate	≤ 2.5%
EINECS: 228-500-6	☒ Xn, ☒ Xi; R 20/21/22-36	
	Warning: ⚠ 3.1.O/4, 3.1.D/4, 3.1.I/4, 3.3/2	

- **REACH - Pre-registered substances** All components are REACH pre-registered.
- **Additional information** For the wording of the listed risk phrases refer to section 16.

* 4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly rinse with water.

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- **After eye contact**
Rinse opened eye for several minutes (at least 10 min) under running water.
Seek immediate medical advice.
 - **After swallowing**
Rinse out mouth and then drink 1-2 glasses of water.
Seek immediate medical advice.
 - **The following symptoms may occur:**
after inhalation:
irritations
allergic reactions
After swallowing of large amounts:
sickness
mucous membrane irritation
cramps
general feeling of sickness
gastric pain
-

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
 - **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
nitrogen oxides (NO_x)
carbon monoxide and carbon dioxide
Phosphorus oxides (P_xO_x)
sodium monoxide
dipotassium oxide
iodine compounds
 - **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.
 - **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
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6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
 - **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
 - **Measures for cleaning/collecting:**
Dispose of contaminated material as waste according to item 13.
Collect mechanically.
Ensure adequate ventilation.
 - **Additional information:** No dangerous materials are released.
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* 7 Handling and storage

- **Handling**
- **Information for safe handling:** Thorough dusting.
- **Information about protection against explosions and fires:**
Substance/product is auto-extinguishing, but can burn when combined with flammable material.
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.

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- **Information about storage in one common storage facility:** Store away from oxidizing agents.
 - **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
 - Store under dry conditions.
 - Protect from humidity and keep away from water.
 - Protect from the effects of light.
 - **Recommended storage temperature:** 20°C +/- 5°C
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* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
 - **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the compilation were used as basis.
 - **Personal protective equipment**
 - **General protective and hygienic measures**
 - Wash hands during breaks and at the end of the work.
 - Do not eat, drink or smoke while working.
 - **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
 - **Recommended filter device for short term use:** Filter P1
 - **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.
 - **Material of gloves**
 - nitrile rubber, NBR
 - Recommended thickness of the material: ≥ 0.11 mm
 - **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - Value for the permeation: Level ≥ 1 (>10 min)
 - **Eye protection:** Safety glasses
 - **Body protection:** Protective work clothing.
-

* 9 Physical and chemical properties:

· Form:	Powder
· Colour:	White
· Odour:	Odourless
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	1330°C
· Flash point:	Not applicable
· Danger of explosion:	Product is not explosive.
· Density	Not determined
· Solubility in / Miscibility with Water:	Soluble
· pH-value (10.5 g/l) at 20°C:	6.3
· Solvent content:	
Organic solvents:	0.0 %

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Solids content:	100.0 %
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*10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **Materials to be avoided:** oxidizing agents
- **Dangerous products of decomposition:** see chapter 5

*11 Toxicological information

- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.

- **LD/LC50 values that are relevant for classification:**

6283-63-2 N,N-diethylbenzene-1,4-diammonium sulphate

Oral	LD50	497 mg/kg (rat) (MERCK)
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- **Primary irritant effect:**
- **on the skin:** DPD may cause allergic skin reaction
- **on the eye:** Irritant effect.
- **Sensitization:** Sensitizing effect by skin contact is possible by prolonged/repeated exposure.
- **Additional toxicological information:**
After swallowing of large amounts:
disorder of electrolyte balance
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** no data available

*12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:**
Quantitative data on the ecological effect of this product are not available.
The following statements refer to the individual components.
- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:**
Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.
- **Ecotoxic effects:**

- **Acquatic toxicity:**

6283-63-2 N,N-diethylbenzene-1,4-diammonium sulphate

log P(o/w)	2.24
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- **Remark:**
Toxic for fish:
sulphates > 7 g/l
- **Bacterial toxicity:** sulphates toxic > 2.5 g/l

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- **Additional ecological information:**
 - **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment acc. VwVwS Annex 4): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
 - **PBT assessments:** no data available
 - **vPvB assessments:** no data available
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13 Disposal considerations

- **Product:**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

European waste catalogue	
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleaning agent:** Water, if necessary with cleaning agent.
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14 Transport information

- | | |
|--|---|
| Land transport ADR/RID (cross-border) | |
| ADR/RID-GGVS/E Class: | - |

- | | |
|---------------------------------|----|
| Maritime transport IMDG: | |
| IMDG Class: | - |
| Marine pollutant: | No |

- | | |
|--|---|
| Air transport ICAO-TI and IATA-DGR: | |
| ICAO/IATA Class: | - |

- **UN "Model Regulation":** -
 - **Transport/Additional information:** Not dangerous according to the above specifications.
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*15 Regulatory information

- **Designation according to EC guidelines:**
The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.
 - **Special designation of certain preparations:**
Safety data sheet available for professional user on request.
 - **National regulations**
 - **Information about limitation of use:** Not required.
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*16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
36 Irritating to eyes.

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· Abbreviations and acronyms:

EC50: effective concentration, 50 percent (in vivo)

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

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· Sources

NTP (National Toxicology Program)

IUCLID (International Uniform Chemical Information Database)

Data arise from reference works and literature.

· * Data compared to the previous version altered.

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