

SAFETY DATA SHEET

DPD FREE CHLORINE TEST SACHET

Last updated on 30th November 2012






1. PRODUCT IDENTIFICATION AND COMPANY INFORMATIONS

Product Name:	DPD FREE CHLORINE TEST SACHET
Product Number:	94X377001
Chemical Family:	Mixture of organic and inorganic compounds
Company Informations:	EUTECH INSTRUMENTS PTE LTD. THERMO FISHER SCIENTIFIC Blk 55, Ayer Rajah Crescent, #04-16/24, Singapore 139949, Website: http://www.eutechinst.com E-mail: eutech@thermofisher.com
Telephone No:	(65) 6778 6876
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Product Use:	Laboratory and Industrial Reagent

2. HAZARD IDENTIFICATION

Classification of the substance or mixture:	
Classification according to Regulation (EC) No 1272/2008	The product is not classified as hazardous according to the CLP regulation.
Classification according to Directive 67/548/EEC or Directive 1999/45/EC	Not applicable.
Information concerning particular hazards for human and environment:	The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" (1999/45/EC) in the latest valid version.
Label elements- Labeling according to EU guidelines:	The product is not subject to classification according to the calculation methods of the "General Classification Guideline for preparation of EC" as issued in the last version.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures		
Description::	Mixture of organic and inorganic compounds	
Dangerous components:		
CAS: 6283-63-2 EINECS: 228-500-6	N,N-diethylbenzene-1,4-diammonium sulphate  Xn R21/22;  Xi R36/37/38  Acute Tox. 4, H302; Acute Tox. 4, H312; Skin irrit 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-5 %
CAS:150-38-9 EINECS: 205-758-8	EDTA trisodium salt  Xi R36 R52/53  Eye irrit. 2, H319; Aquatic Chronic 3, H412	2.5-5 %

- **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

Description of 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 wash with water and soap and rinse thoroughly.
After eye contact:	Rinse opened eye for several minutes under running water (at least 15 minutes). If symptoms persist, consult doctor.
After swallowing:	Rinse out mouth and then drink 1-2 glasses of water. In case of persistent symptoms consult doctor.
Most important symptoms and effects, both acute and delayed	After Absorption: irritation, After swallowing of large amounts: thirst, vomiting, allergic reactions

5. FIRE FIGHTING MEASURES

Extinguishing media:	
Suitable extinguishing agents:	Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture	Formation of toxic gases is possible during heating or in case of fire. Phosphorous oxides (PxOx), Dipotassium oxide, Sodium oxide
Advice for firefighters	
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. Ambient fire may liberate hazardous vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away.
Environmental precautions:	Do not allow product to reach sewage system or water bodies.
Methods and material for containment and cleaning up:	Dispose of contaminated material as waste according to item 13. Collect mechanically. Ensure adequate ventilation.

7. HANDLING AND STORAGE

Precautions for safe handling	No special precautions necessary if used correctly.
Information about protection against explosions and fires:	The product is not flammable.
Requirements to be met by storerooms and receptacles:	Store in cool location. Recommended storage temperature: 20 deg C +/- 5 deg C. Storage class 13.
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.

8. EXPOSURE CONTROLS/PERSIONAL PROTECTION

Control parameters:	
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.
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 trough 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 use against the effects of fumes / dust
Body protection:	Protective work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder, Color- White
Odor:	Odorless
Odor threshold:	Not determined.
pH-value (20 g/l) at 20°C:	6.4
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
Flash point:	$> 100^{\circ}\text{C}$
Inflammability (solid, gaseous):	Not determined.
Danger of explosion:	Product is not explosive.
Lower Explosion limits:	Not determined.
Upper Explosion limits:	Not determined.
Density:	Not determined.
Relative density:	Not determined.
Vapor density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	Not applicable.
Organic solvents:	0.0 %
Solids content:	100.0 %
Other information	No further relevant information available

10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:	To avoid thermal decomposition do not overheat.
Conditions to avoid:	No further relevant information available.

Incompatible materials:	Oxidizing agents
Hazardous decomposition products:	Nitrous gases, Carbon monoxide and Carbon dioxide Sodium monoxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Quantitative data on the toxicity of the preparation are not available. The following statements refer to the individual components.	
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)
150-38-9 EDTA trisodium salt	
Oral LD50	2150 mg/kg (rat) (RTECS)
Primary irritant effect: On the skin::	DPD may cause allergic skin reaction
On the eye:	Slight irritations possible
Sensitization:	No sensitizing effects known.
Additional toxicological information	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. The following applies to aromatic amines in general: systemic effect - methaemoglobinaemia with headache, cardia dysrhythmia, drop in blood pressure, dyspnoea, spasm, principal symptom: cyanosis (blue discoloration of the blood) disorder of electrolyte balance
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)	No data available

12. ECOLOGICAL INFORMATION

Aquatic toxicity:	
150-38-9 EDTA trisodium salt	
LC50	121 mg/l/96h (Lepomis macrochirus) (Merck)
Persistence and degradability	No further relevant information available.
Other information:	Quantitative data on the ecological effect of this product are not available. The following statements refer to the individual components.
Bioaccumulative potential	Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.
Behavior in environmental systems:	
6283-63-2 N,N-diethylbenzene-1,4-diammonium sulphate	
log P(o/w)	2.24 (.)
Mobility in soil	No further relevant information available.
Ecotoxic effects: Remark: Toxic for fish	Sulphates > 7 g/l
Additional ecological information General notes:	Water danger class 3 (German Regulation) (Self-assessment acc. VwVwS Annex 4): extremely hazardous for water. Do not allow product to reach ground water, water bodies or sewage system, even in small quantities. Danger to drinking

	water if even extremely small quantities leak into soil.
Results of PBT and vPvB assessment	No data available
Other adverse effects	No further relevant information available.

13. DISPOSAL CONSIDERATION

Waste treatment method-European waste catalogue	
16-05-09	Discarded chemicals other than those mentioned in 16-05-06, 16-05-07, 16-05-08.
Uncleaned packaging: Recommendation:	Disposal must be made according to official regulations.
Recommended cleaning agent:	Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

UN-Number ADR, ADN, IMDG, IATA	Not regulated
UN proper shipping name · ADR, ADN, IMDG, IATA	Not regulated
Transport hazard class(es) ADR, ADN, IMDG, IATA	Not regulated
Packing group ADR, IMDG, IATA	Not regulated
Environmental hazards- Marine pollutant:	No
Special precautions for user	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional information:	Not dangerous according to the above specifications

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture	
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.
Chemical safety assessment:	A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.	
Relevant phrase:	
H302 Harmful if swallowed.	
H312 Harmful in contact with skin.	
H315 Causes skin irritation.	

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

R21/22 Harmful in contact with skin and if swallowed.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R52/53 Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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