Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 14.05.2002 Supersedes edition of 14.01.2000



1.	Identification of the	substance/preparation	and of the company/undertaking	
	Identification of the product			
	Catalogue No.:	100597		
	Product name:	-		
	Company/undertaking	g identification		
	Company:	Merck KGaA * 64	4271 Darmstadt * Germany * Tel: +49 (0)61	51/72-0
	Emergency telephone N	lo.: +49 (0)6151/7211	12 * Fax: +49 (0)6151/72-7780	
2.	Composition/inform	ation on ingredients		
	Mixture of inorganic an	d organic compounds.		
	Hazardous ingredient	ts:		
	Name according to EC Dir CAS-No. EC No.	rectives: EC-Index-No.	Labelling according to EC Directives	Content:
	Ethylenedinitrilotetraaco 64-02-8 200-573		Xn R 22-36/38-52/53	≥ 1 - < 10 %
3.	Hazards identificatio	on		
	Attention - this preparation contains a substance which has not been fully tested so far.			
	The test results available so far do not permit a complete evaluation. Risks cannot be excluded if the product is handled inappropriately.			
4.	First aid measures			
	After eye contact: rins ophtalmologist if necess	sh off with plenty of water. se out with plenty of water sary.	Remove contaminated clothing. with the eyelid held wide open. Call in f water, induce vomiting. call in physician i	f

Me	erck Safety Data Sheet		According to EC Directive 91/155/EEC
	Catalogue No.: Product name:	100597 Chlorine Cell Test (free and total chlorine) DPD 0.05 - 7.50 mg/l Cl ₂ Cl ₂ frei/free/libre/libero: 75 Tests Cl ₂ gesamt/total/totale: 75 Tests Spectroquant® Cl ₂ -1	Method: photometric,
5.	Fire-fighting measures		
	Suitable extinguishing media: In adaption to materials stored	n the immediate neighbourhood.	
	Special risks: Non-combustible. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: nitrous gases, phosphorus oxides.		
	Special protective equipment for fire fighting: Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.		
	Other information: Contain escaping vapours with groundwater.	water. Prevent fire-fighting water from enter	ing surface water or
6.	Accidental release measure	s	
	Person-related precautionary m Avoid generation of dusts; do n		
	Environmental-protection meas Do not allow to enter sewerage		
	Procedures for cleaning / absorp Take up dry. Forward for dispo	tion: sal. Clean up affected area.	
7.	Handling and storage		
	Handling:		
	No further requirements.		
	Storage:		
	Tightly closed. In a well-ventilated place. At $+15^{\circ}$ C to $+25^{\circ}$ C. The data apply to the entire pack.		
8.	Exposure controls/persona	protection	
	Personal protective equipme	nt:	
	Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.		
	Respiratory protection:	required when dusts are generated.	
	Eye protection:	required	
	Hand protection:	required	
	Industrial hygiene: Change contaminated clothing. Wash hands after working with substance.		

Catalogue No.: Product name: 100597 Chlorine Cell Test (free and total chlorine) Method: photometric, DPD 0.05 - 7.50 mg/l Cl₂ Cl₂ frei/free/libre/libero: 75 Tests Cl₂ gesamt/total/totale: 75 Tests Spectroquant® Cl₂-1

9. Physical and chemical properties

Form:	solid	
Colour:	light grey	
Odour:	odourless	
pH value		not available
Melting point		not available
Boiling point		not available
Ignition temperature		not available
Flash point		not available
Explosion limits	lower	not available
	upper	not available
Density		not available
Solubility in water	(20 °C)	soluble

10. Stability and reactivity

Conditions to be avoided Heating. Substances to be avoided acetic acid anhydride (heat) Hazardous decomposition products

in the event of fire: See chapter 5.

Further information

partial component: incompatible with alkaline substances.

11. Toxicological information

Acute toxicity

Quantitative data on the toxicity of this product are not available.

Further toxicological information

Property that must be anticipated on the basis from the components of the preparation:

After skin contact: Slight irritations. After eye contact: Slight iritations. After swallowing: Possible symptoms: nausea, vomiting, diarrhoea. After absorption of large quantities: agitation, spasms, tiredness, ataxia (impaired locomotor coordination), drop in temperature.

Further data

Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

According to EC Directive 91/155/EEC

Merck Safety Data Sheet

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12. Ecological information

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Biological effects: Fertilizing effect possible.

Further ecologic data: Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. Transport information

Entire package: not subject to transport regulations.

15. Regulatory information

Labelling according to EC Directives

0 0		
Symbol:		
R-phrases:		
S-phrases:		
Additional labelling according to German regs. on hazardous substances and to the German Imission Protection Act	Attention - this preparation contains a substance which has not been fully tested so far.	1
German regulations		
Water pollution class	2 (polluting substance) VwVwS Anh. 4	
Storage class VCI	10-13	

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16. Other information

Text of any R phrases referred to under heading 2:

22	Harmful if swallowed.
36/38	Irritating to eyes and skin.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Reason for alteration

Chapter 5: fire-fighting measures. Chapter 11: toxicological information. Chapter 12: ecological information.

Chapter 15: change in water pollution class.

General update.

Contact for information:

USF/GEN P * Tel: +49 6151/722775 * Fax: +49 6151/726433 * e-mail:prodsafe@merck.de

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Safety Data Sheet

According to EC Directive 91/155/EEC

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	Company/undertaking				
	Company: Emergency telephone N	Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0 -+49 (0)6151/72112 * Fax: +49 (0)6151/72-7780			
		0 (4) (0)01317/2112 Tux. (4) (0)01317/27700			
2.	Composition/information	-			
	Aqueous solution of ino	rganic compounds.			
3.	Hazards identificatio	n			
	No hazardous product as	s specified in Directive 67/548/EEC.			
4.	First aid measures				
	After inhalation: fresh air. After skin contact: wash off with water. After eye contact: rinse out with water. After swallowing: make victim drink plenty of water, induce vomiting. call in physician if feeling unwell.				
5.	Fire-fighting measures				
	Suitable extinguishing media:				
	In adaption to materials stored in the immediate neighbourhood.				
	Special risks: Non-combustible.				
6.	Accidental release measures				
	Person-related precautionary measures: Do not inhale vapours/aerosols.				
	Procedures for cleaning / absorption: Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.				
7.	Handling and storag	e			
	Handling:				
	No further requirements				
	Storage:				
	Tightly closed. In a well-ventilated place. At $+15^{\circ}$ C to $+25^{\circ}$ C.				

Ме	rck Safety Data Sh	eet		According to EC Directive 91/155/	
	Catalogue No. Product name:	Chlorine Ce DPD 0.05 - Cl ₂ frei/free	7.50 mg/l Cl ₂ e/libre/libero: 75 total/totale: 75 T		
8.	Exposure controls/personal protection				
	Personal protective e	equipment:			
	Protective clothing sh	ould be selected specification of the hazardous	s substances har	orking place, depending on ndled. The resistance of the he respective supplier.	
	Respiratory protection:	required wh	en vapours/aero	osols are generated.	
	Eye protection:	required			
	Hand protection:	Use recomm	nended		
	Industrial hygiene: Change contaminated of	clothing. Wash hands a	ıfter working wi	ith substance.	
9.	Physical and chemi	cal properties			
	Form:	liquid			
	Colour:	colourless			
	Odour:	odourless			
	pH value			-	
	at Melting point	(20 °C)	~ 6.5-7. not ava		
	Boiling point		not ava: ~ 100	°C	
	Ignition temperature		not ava		
	Flash point		not ava		
	Explosion limits	lower	not ava	ilable	
		upper	not ava	ilable	
	Density	(20 °C)	1.01	g/cm ³	
	Solubility in water	(20 °C)	soluble		
10.	Stability and reactivity				
	Conditions to be avoided				
	Heating.				
	Substances to be avoided				
	The generally known reaction partners of water.				
	Hazardous decomposition products				
	no information availab	-			
11.	Toxicological inform	nation			

Quantitative data on the toxicity of this product are not available.

Catalogue No.: Product name:

he: Chlorine Cell Test (free and total chlorine) Method: photometric, DPD 0.05 - 7.50 mg/l Cl₂ Cl₂ frei/free/libre/libero: 75 Tests Cl₂ gesamt/total/totale: 75 Tests Spectroquant® Cl₂-2

Further toxicological information

Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance.

Other notes: Sensitization possible in predisposed persons.

Further data

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

100597

Further ecologic data:

No ecological problems are to be expected when the product is handled and used with due care and attention.

13. Disposal considerations

Product:

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Packaging:

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14. Transport information

Entire package: not subject to transport regulations.

15. Regulatory information

Labelling according to EC Directives			
Symbol:			
R-phrases:			
S-phrases:			
German regulations			
Water pollution class	nwg (nonpolluting substance) VwVwS Anh. 4		
Storage class VCI	10-13		

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16. Other information

Reason for alteration

Chapter 15: change in water pollution class.

General update.

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