

Dimercaptopropanol	Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM						
Revision date: 14.11.2023	Product code: 2763	l i i i i i i i i i i i i i i i i i i i	Page 1 of 13				
SECTION 1: Identification of the	e substance/mixture and of the comp	pany/undertaking					
<u>1.1. Product identifier</u> Dimercaptopropanol solution	5 % (m/v) for complexiometric titration ind	icator solution for METROHM					
1.2. Relevant identified uses of the	substance or mixture and uses advised	against					
Use of the substance/mixture Laboratory chemical Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen)							
Uses advised against							
Do not use for private purpos	es (household).						
1.3. Details of the supplier of the s	afety data sheet						
Company name:	AnalytiChem GmbH						
Street:	Stempelstraße 6						
Place:	D-47167 Duisburg						
Telephone:	0203/5194-0	Telefax: 0203/5194-290					
E-mail:	info@analytichem.de						
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117					
E-mail:	produktsicherheit@analytichem.de						
Internet:	www.analytichem.de						
Responsible Department:	Abteilung Produktsicherheit						
<u>1.4. Emergency telephone</u> number:	For Hazardous Materials [or Dangero Exposure, or Accident Call CHEMTR 1-800-424-9300 Outside USA and Ca accepted)	EC Day or Night Within USA and Canada	a:				
Further Information							
This product is a mixture. REACH Registration Number see section 3.							

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225 Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Sens. 1A; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling dimercaprol

Signal word:

Pictograms:





Dimercaptopro	ppanol solution 5 % (m/v) for complexiometric titration indicator solution METROHM	for
Revision date: 14.11.2023	Product code: 27631	Page 2 of 13
Hazard statements		
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
Precautionary statemen	ts	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P403+P235	Store in a well-ventilated place. Keep cool.	

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name						
	EC No	Index No	REACH No				
	Classification (Regulation (EC) No 1272/2008)						
64-17-5	ethanol						
	200-578-6	603-002-00-5	01-2119457610-43				
	Flam. Liq. 2, Eye Irrit. 2; H225 H31	9					
59-52-9	dimercaprol			5 - < 10 %			
	200-433-7						
	Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1A, STOT SE 3; H301 H315 H319 H317 H335						

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	C No Chemical name						
	Specific Conc. Limits, M-factors and ATE							
64-17-5	200-578-6	200-578-6 ethanol						
	inhalation: LC 100	inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100						
59-52-9	200-433-7	200-433-7 dimercaprol						
	oral: ATE = 100 mg/kg							

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM Revision date: 14.11.2023 Product code: 27631 Page 3 of 13 After inhalation Provide fresh air. Call a physician immediately. After contact with skin Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse. Call a physician immediately. After contact with eyes After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing. After ingestion Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Irritant Dizziness The product causes narcotic-like effects. Inebriation Vomiting Allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Combustible liquid.

Vapours are heavier than air, spread along floors and form explosive mixtures with air. Hazardous combustion products In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide

5.3. Advice for firefighters

Remove persons to safety. Do not inhale explosion and combustion gases. Avoid contact with skin, eyes and clothes. In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Suppress gases/vapours/mists with water spray jet. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM

Revision date: 14.11.2023

Product code: 27631

Page 4 of 13

General advice

Keep away from sources of ignition - No smoking. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators,

and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment

Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Collect in closed and suitable containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Read label before use. Handle and open container with care. When using do not eat, drink, smoke, sniff. Keep container tightly closed. Use personal protection equipment. Use extractor hood (laboratory). Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

Advice on protection against fire and explosion

Take action to prevent static discharges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for

Product code: 27631

METROHM

Page 5 of 13

Revision date: 14.11.2023 drink.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse. If handled uncovered, arrangements with local exhaust ventilation have to be used. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Vapours may form explosive mixtures with air.

7.3. Specific end use(s)

Laboratory use Laboratory chemical

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
64-17-5	Ethyl alcohol	1000	-		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
64-17-5	ethanol						
Worker DNEL,	long-term	inhalation	systemic	950 mg/m³			
Worker DNEL,	long-term	dermal	systemic	343 mg/kg bw/day			
Consumer DNE	EL, long-term	inhalation	systemic	114 mg/m³			
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day			
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day			



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM

Revision date: 14.11.2023

Product code: 27631

Page 6 of 13

PNEC values

CAS No	Substance			
Environmen	tal compartment	Value		
64-17-5	ethanol			
Freshwater		0,96 mg/l		
Freshwater	(intermittent releases)	2,75 mg/l		
Marine wate	r	0,79 mg/l		
Freshwater	sediment	3,6 mg/kg		
Marine sedi	nent	2,9 mg/kg		
Secondary p	Secondary poisoning			
Micro-organ	Micro-organisms in sewage treatment plants (STP)			
Soil		0,63 mg/kg		

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Trade name/designation KCL 897 Butoject® Suitable material: Butyl caoutchouc (butyl rubber) 0,3 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Trade name/designation KCL 720 Camapren® Suitable material: CR (polychloroprene, chloroprene rubber) 0,65 mm Wearing time with occasional contact (splashes): > 60 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. Danger of explosion



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM

Revision date: 14.11.2023

Product code: 27631

Page 7 of 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<u>9.</u>	1. Information on basic physical and che	emical properties	
	Physical state:	Liquid	
	Colour:	clear	
	Odour:	characteristic	
	Odour threshold:	No data available	
	Melting point/freezing point:		No data available
	Boiling point or initial boiling point and		>35 °C
	boiling range:		
	Flammability:		not applicable
	Lower explosion limits:		No data available
	Upper explosion limits:		No data available
	Flash point:		<21 °C
	Auto-ignition temperature:		No data available
	Decomposition temperature:		No data available
	pH-Value:		No data available
	Viscosity / kinematic:		No data available
	Water solubility:		No data available
	Solubility in other solvents		
	No data available		
	Dissolution rate:		No data available
	Partition coefficient n-octanol/water:		No data available
	Dispersion stability:		No data available
	Vapour pressure:		No data available
	Vapour pressure:		No data available
	Density:		0,80911 g/cm³
	Relative density:		No data available
	Bulk density:		No data available
	Relative vapour density:		No data available
	Particle characteristics:		No data available
9.	2. Other information		
	Information with regard to physical haz	ard classes	
	Explosive properties		
	Vapours can form explosive mixtures	with air.	
	Sustaining combustion:		Sustaining combustion
	Self-ignition temperature		5
	Solid:		not applicable
	Gas:		not applicable
	Oxidizing properties		
	Not oxidising.		
	Other safety characteristics		
	Evaporation rate:		No data available
	Solvent separation test:		No data available
	Solvent content:		No data available
	Solid content:		No data available
	Sublimation point:		No data available
	Softening point:		No data available
	Pour point:		No data available
	No data available:		
	Viscosity / dynamic:		No data available



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM

Revision date: 14.11.2023

Product code: 27631

No data available

Page 8 of 13

Flow time:

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

Vapours can form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Oxidising agent

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

Plastic articles

Rubber articles

10.6. Hazardous decomposition products

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1616 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name	Chemical name								
	Exposure route	Dose		Species	Source	Method				
64-17-5	ethanol	ethanol								
	oral	LD50 mg/kg	10470	Rat	Study report (1976)	OECD Guideline 401				
	inhalation (4 h) vapour	LC50 mg/l	124,7	Rat	Study report (1980)	OECD Guideline 403				
59-52-9	dimercaprol	dimercaprol								
	oral	ATE mg/kg	100							

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.



Dimercaptopropanol solution 5 % (Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM						
Revision date: 14.11.2023	Product code: 27631	Page 9 of 13					
Sensitising effects May cause an allergic skin reaction. (dimercapi							
Carcinogenic/mutagenic/toxic effects for reprode Based on available data, the classification crite							
STOT-single exposure Based on available data, the classification crite	eria are not met.						
STOT-repeated exposure Based on available data, the classification crite	eria are not met.						
Aspiration hazard Based on available data, the classification crite	eria are not met.						
Information on likely routes of exposure There are no data available on the mixture itse	lf.						
Specific effects in experiment on an animal There are no data available on the mixture itse	lf.						
Additional information on tests There are no data available on the mixture itse	lf.						
Practical experience No data available							
11.2. Information on other hazards							
Endocrine disrupting properties There are no data available on the mixture itse	lf.						
Other information Irritant Dizziness The product causes narcotic-like effects. Inebriation Vomiting							
Further information	removal of natural fat from the skin resulting in dermatitis (skin						
SECTION 12: Ecological information							
<u>12.1. Toxicity</u> Based on available data, the classification crite	eria are not met.						



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM

Revision date: 14.11.2023

Product code: 27631

Page 10 of 13

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
64-17-5	ethanol							
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus	Bulletin of Environmental Contamination	other: EPA-660/3-75-00 9, 1975	
	Acute algae toxicity	ErC50 22000 mg/l	ca.	96 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	other: DIN 38412 Teil 11	
	Algae toxicity	NOEC mg/l	5400	5 d	Skeletonema costatum	Environ Toxicol Chem 8(5):451-455. (1989	Study to determine the sensitivity of a	
	Crustacea toxicity	NOEC	2 mg/l	10 d	Ceriodaphnia dubia	Arch Environ Contam Toxicol 20(2):211-21	Follows the basic methodology for the th	

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol	1	Cyprinus carpio	Comparative Biochemi

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Do not allow to enter into surface water or drains.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a physico-chemical treatment facility under observation of official regulations. Do not allow to enter into surface water or drains.



Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM		
Revision date: 14.11.2023	Product code: 27631	Page 11 of 13
to the industry and process. Handle contaminated packages in th	pers/waste descriptions must be carried out according to the EEC, specific e same way as the substance itself.	
SECTION 14: Transport information		
Land transport (ADR/RID) <u>14.1. UN number or ID number:</u> 14.2. UN proper shipping name:	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol)	
<u>14.3. Transport hazard class(es):</u> 14.4. Packing group: Hazard label:	3 3	
Classification code: Special Provisions: Limited quantity:	3 F1 274 601 640D 1 L	
Excepted quantity: Transport category: Hazard No:	E2 2 33	
Tunnel restriction code: Inland waterways transport (ADN) <u>14.1. UN number or ID number:</u>	D/E UN 1993	
<u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> 14.4. Packing group:	FLAMMABLE LIQUID, N.O.S. (ethanol) 3 II	
Hazard label: Classification code: Special Provisions:	3 F1 274 601 640D	
Limited quantity: Excepted quantity:	1 L E2	
Marine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u>	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol) 3	
<u>14.4. Packing group:</u> Hazard label: Special Provisions:	II 3 274	
Limited quantity: Excepted quantity: EmS:	1 L E2 F-E, S-E	
Air transport (ICAO-TI/IATA-DGR) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u>	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol)	
14.3. Transport hazard class(es): 14.4. Packing group: Hazard label: Special Provisions:	3 3	
Limited quantity Passenger: Passenger LQ: Excepted quantity:	A3 1 L Y341 E2	
IATA-packing instructions - Passenger: IATA-max. quantity - Passenger:	353 5 L	



according to Regulation (EC) No 1907/2006

Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for METROHM				
Revision date: 14.11.2023	Product code: 27631	Page 12 of 13		
IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	364 60 L			
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	No			
 <u>14.6. Special precautions for user</u> Warning: Combustible liquid. <u>14.7. Maritime transport in bulk according to</u> not applicable 	IMO instruments			
SECTION 15: Regulatory information				
	ations/legislation specific for the substance or mixture			
EU regulatory information Restrictions on use (REACH, annex XVII): Entry 3, Entry 40 Information according to Directive 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS			
National regulatory information				
Employment restrictions:	Observe restrictions to employment for juveniles according to the work protection guideline' (94/33/EC).	ne 'juvenile		
Water hazard class (D):	3 - highly hazardous to water			
SECTION 16: Other information				
(European Agreement concerning the li IMDG: International Maritime Code for I IATA: International Air Transport Assoc	- single exposure des marchandises dangereuses par Route nternational Carriage of Dangerous Goods by Road) Dangerous Goods ation Classification and Labelling of Chemicals g Commercial Chemical Substances			

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H302	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1A; H317	Calculation method

Relevant H and EUH statements (number and full text)



Revision date: 14.11.2023

according to Regulation (EC) No 1907/2006

Dimercaptopropanol solution 5 % (m/v) for complexiometric titration indicator solution for

Product code: 27631

Page 13 of 13

H225 H301	Highly flammable liquid and vapour. Toxic if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)