

Mixed indicator stock solution 2 g dimidium bromide + 1 g disulfine blue VN 150 /l in ethanol 96 %				
Revision date: 14.03.2024	Product code: 202	68	Page 1 of 12	
SECTION 1: Identification of t	ne substance/mixture and of the con	npany/undertaking		
1.1. Product identifier				
Mixed indicator stock solution	on 2 g dimidium bromide + 1 g disulfine b	ue VN 150 /I in ethanol 96 %		
UFI:	S34T-J17Y-500A-V66T			
1.2. Relevant identified uses of the	ne substance or mixture and uses advise	ed against		
Use of the substance/mixture				
Laboratory chemical				
	stances as such or in preparations at indu			
Professional uses: Public d	omain (administration, education, entertai	nment, services, craftsmen)		
Uses advised against				
Do not use for private purpo	oses (household).			
1.3. Details of the supplier of the	<u>safety data sheet</u>			
Company name:	AnalytiChem GmbH			
	ACD			
Street:	Stempelstraße 6			
Place:	D-47167 Duisburg			
Telephone:	0203/5194-0	Telefax:0203/5194-290		
E-mail:	info@analytichem.de	T     0000/5404 407/447		
Contact person:	Abteilung Produktsicherheit	Telephone:0203/5194-107/117		
E-mail: Internet:	produktsicherheit@analytichem.de www.analytichem.de			
Responsible Department:	Abteilung Produktsicherheit			
	•	rous Coodel Incidente Spill Look Eiro		
1.4. Emergency telephone       For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,         number:       Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:         1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)				
Further Information				

inapplicable, this product is a mixture REACH registration number see section 3

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## **GB CLP Regulation** Flam. Liq. 2; H225

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

GB CLP	Regulation
Signal	word:

Pictograms:

Danger



Hazard statements H225 H319

Highly flammable liquid and vapour. Causes serious eye irritation.



# Mixed indicator stock solution 2 g dimidium bromide + 1 g disulfine blue VN 150 /l in

## ethanol 96 %

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### **Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 P280	Keep container tightly closed.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 P403+P235	If eye irritation persists: Get medical advice/attention. 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			Quantity
	EC No	Index No	REACH No	
Classification (GB CLP Regulation)				
64-17-5	5 ethanol			95 - < 100 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

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

Specific Conc	Specific Conc. Limits, M-factors and ATE				
CAS No	EC No Chemical name				
	Specific Conc. Limits, M-factors and ATE				
64-17-5	200-578-6	ethanol	95 - < 100 %		
	inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100				

### 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

### After inhalation

Provide fresh air.

## After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse.

#### 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.

## After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.



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

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

## 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 Beware of reignition.

### 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

## 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 Consult an expert 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.



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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 vapour/aerosol. 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 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. national regulations

### Further information on storage conditions

Vapours may form explosive mixtures with air. storage temperature  $+2^{\circ}C - +25^{\circ}C$ 



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Protect against: Light

## 7.3. Specific end use(s)

Laboratory use Laboratory chemical

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

#### **DNEL/DMEL** values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
64-17-5	ethanol					
Worker DNEL,	orker DNEL, long-term inhalation systemic 950 mg/m <sup>3</sup>					
Worker DNEL,	orker DNEL, long-term dermal systemic 343 mg/kg bw/d					
Consumer DNEL, long-term inhalation system			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		

## **PNEC** values

CAS No	Substance				
Environment	Environmental compartment Value				
64-17-5	ethanol				
Freshwater		0,96 mg/l			
Freshwater (intermittent releases) 2,75 mg/l					
Marine water		0,79 mg/l			
Freshwater sediment 3,					
Marine sediment		2,9 mg/kg			
Secondary poisoning 380 mg/kg					
Micro-organisms in sewage treatment plants (STP) 580 mg/l					
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

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

#### By long-term hand contact



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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

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	red	
Odour:	like: Ethanol	
Odour threshold:	No data available	
Melting point/freezing point:		-114,5 °C
Boiling point or initial boiling point and		78 °C
boiling range:		
Flammability:		not applicable
Lower explosion limits:		3,1 vol. %
Upper explosion limits:		27,7 vol. %
Flash point:		~17 °C
Auto-ignition temperature:		425 °C
Decomposition temperature:		not determined
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		easily soluble
Solubility in other solvents		-
not determined		
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		-0,31
Dispersion stability:		No data available
Vapour pressure:		59 hPa
(at 50 °C)		
Vapour pressure:		No data available
Density (at 20 °C):		0,8073 g/cm <sup>3</sup>
Relative density:		No data available



## Safety Data Sheet

## according to UK REACH Regulation

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Bulk density:	No data available	
Relative vapour density:	not determined	
Particle characteristics:	No data available	
2. Other information		
Information with regard to physical hazard classes		
Explosive properties		
Vapours can form explosive mixtures with air.		
Sustaining combustion:	No data available	
Self-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Oxidizing properties		
Not oxidising.		
Other safety characteristics		
Evaporation rate:	not determined	
Solvent separation test:	No data available	
Solvent content:	No data available	
Solid content:	not determined	
Sublimation point:	No data available	
Softening point:	No data available	
Pour point:	No data available	
No data available:		
Viscosity / dynamic:	1,2 mPa⋅s	
(at 20 °C)		
Flow time:	No data available	
Further Information		
No data available		

### 10.1. Reactivity

Highly flammable.

Vapours can form explosive mixtures with air.

## 10.2. Chemical stability

Protect against: Light

## 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. Protect against: Light

## 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



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## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in GB CLP Regulation

## Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

#### Acute toxicity

Based on available data, the classification criteria are not met.

### ATEmix calculated

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

CASNO	Chemical name

CASINO							
	Exposure route	Dose		Species	Source	Method	
64-17-5	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	

### Irritation and corrosivity

Causes serious eye irritation.

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

#### Sensitising effects

Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### Information on likely routes of exposure

There are no data available on the mixture itself.

## Specific effects in experiment on an animal

There are no data available on the mixture itself.

### Additional information on tests

There are no data available on the mixture itself.

## **Practical experience**

There are no data available on the mixture itself.

## 11.2. Information on other hazards

### Endocrine disrupting properties

There are no data available on the mixture itself.

## Other information

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



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## **Further information**

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

## **SECTION 12: Ecological information**

## 12.1. Toxicity

There are no data available on the mixture itself.

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 UK REACH.

## 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 empty into drains.

### **Further information**

Avoid release to the environment.



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## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

### **Disposal recommendations**

Do not allow to enter into surface water or drains.

Send to a physico-chemical treatment facility under observation of official regulations.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

## Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

### Land transport (ADR/RID)

Land transport (ADR/RID)	
14.1. UN number or ID number:	UN 1170
14.2. UN proper shipping name:	ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E
Inland waterways transport (ADN)	
14.1. UN number or ID number:	UN 1170
14.2. UN proper shipping name:	ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2
Marine transport (IMDG)	
14.1. UN number or ID number:	UN 1170
14.2. UN proper shipping name:	ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Special Provisions:	144
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-D
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	UN 1170
14.2. UN proper shipping name:	ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es):	3
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14.4. Packing group:	11	
Hazard label:	3	
Special Provisions:	A3 A58 A180	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y341	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:	353	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	364	
IATA-max. quantity - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
<ul> <li><u>14.6. Special precautions for user</u></li> <li>Warning: Combustible liquid.</li> <li><u>14.7. Maritime transport in bulk according to</u></li> <li>not applicable</li> </ul>	o IMO instruments	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regul	ations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 3, Entry 40, Entry 75		
Information according to Directive	P5c FLAMMABLE LIQUIDS	
2012/18/EU (SEVESO III):		
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles accord	ling to the 'iuvenile
	work protection guideline' (94/33/EC).	
Water hazard class (D):	2 - obviously hazardous to water	
15.2. Chemical safety assessment		
For this substance a chemical safety as	ssessment has not been carried out.	
SECTION 16: Other information		

### Changes

This data sheet contains changes from the previous version in section(s): 1,9.

## Abbreviations and acronyms

Flam. Liq: Flammable liquids
Eye Irrit: Eye irritation
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%



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### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method

## Relevant H and EUH statements (number and full text)

Highly flammable liquid and vapour. Causes serious eye irritation.

H225 H319

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. Provide appropriate information, instructions and training to users

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