

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 14552-32 Bromphenol Blue Indicator Solution

Revision date: 24.05.2017

Product code: 1455232

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

14552-32 Bromphenol Blue Indicator Solution

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Water analysis

### 1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

### 1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 1

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazard Statements:

Highly flammable liquid and vapour.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Causes damage to organs.

Causes damage to organs through prolonged or repeated exposure.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

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#### Hazard components for labelling

methanol

**Signal word:** Danger

#### Pictograms:



#### Hazard statements

H225 Highly flammable liquid and vapour.  
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H370 Causes damage to organs.  
 H372 Causes damage to organs through prolonged or repeated exposure.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P243 Take action to prevent static discharges.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P311 Call a POISON CENTER/doctor.  
 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 If eye irritation persists: Get medical advice/attention.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

#### Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

#### 2.3. Other hazards

no data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
67-56-1	methanol			> 99 %
	200-659-6	603-001-00-X		
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, STOT SE 1, STOT RE 1; H225 H331 H311 H301 H315 H319 H370 H372			

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Take off contaminated clothing and shoes immediately.  
 Show this safety data sheet to the doctor in attendance.  
 First aider needs to protect himself.

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#### After inhalation

Move to fresh air.  
If symptoms persist, call a physician.

#### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
Take off all contaminated clothing immediately.  
If skin irritation persists, call a physician.

#### After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.  
Never give anything by mouth to an unconscious person.  
Consult a physician.

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

Cannot be made non-poisonous. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May be fatal or cause blindness if swallowed.  
Has a degreasing effect on the skin.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

None known.

#### 5.2. Special hazards arising from the substance or mixture

Combustible Liquid  
Vapours may form explosive mixtures with air.  
Fire may liberate hazardous vapours. Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Formaldehyde  
Vapours are heavier than air and may spread along floors.

#### 5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.  
Combustible material In the event of fire, wear self-contained breathing apparatus.  
Pay attention to flashback.

#### Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation, ingestion and contact with skin and eyes. Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Use personal protective equipment.

#### 6.2. Environmental precautions

Dilute with plenty of water. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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#### 6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4. Reference to other sections

See also section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Use only in well-ventilated areas.  
Avoid contact with skin and eyes.  
Avoid breathing vapours, mist or gas.

#### **Advice on protection against fire and explosion**

Combustible Liquid  
Keep away from sources of ignition - No smoking.  
Take precautionary measures against static discharges.

#### **Further information on handling**

Wash hands before breaks and immediately after handling the product. General hygiene considerations  
Observe label precautions.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Requirements for storage rooms and vessels**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 15-25°C

#### **Hints on joint storage**

Incompatible with oxidizing agents. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition.

#### **Further information on storage conditions**

Keep locked up or in an area accessible only to qualified or authorised persons.

### 7.3. Specific end use(s)

Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

#### **Additional advice on limit values**

None known.

### 8.2. Exposure controls

#### **Appropriate engineering controls**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Ensure that eyewash stations and safety showers are close to the workstation location.

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#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.  
Take off contaminated clothing and shoes immediately.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.  
Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

In case of full contact: butyl-rubber  
Glove thickness: 0,7 mm  
Break through time: > 480 min

In case of contact through splashing: Viton (R)  
Glove thickness: 0,7 mm  
Break through time: > 120 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

#### Skin protection

Complete suit protecting against chemicals Flame retardant antistatic protective clothing The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Remove and wash contaminated clothing before re-use.

#### Respiratory protection

Provide adequate ventilation.  
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.  
Use respirator when performing operations involving potential exposure to vapour of the product.  
In case of insufficient ventilation, wear suitable respiratory equipment.

#### Environmental exposure controls

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: liquid  
Colour: colourless  
Odour: alcohol-like

#### Changes in the physical state

Melting point: -98 °C  
Initial boiling point and boiling range: 65 °C  
Sublimation point: no data available  
Softening point: no data available  
Pour point: no data available  
:  
Flash point: 12,8 °C  
Sustaining combustion: No data available

#### Flammability

Solid: no data available  
Gas: no data available

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**Explosive properties**

no data available

Lower explosion limits: 6,7 vol. %

Upper explosion limits: 36,5 vol. %

Ignition temperature: 464 °C

**Auto-ignition temperature**

Solid: no data available

Gas: no data available

Decomposition temperature: no data available

**Oxidizing properties**

no data available

Vapour pressure: 128 hPa  
(at 20 °C)

Vapour pressure: no data available

Density (at 20 °C): 0,792 g/cm<sup>3</sup>

Bulk density: no data available

Water solubility: completely soluble

**Solubility in other solvents**

no data available

Partition coefficient: no data available

Viscosity / dynamic: no data available

Viscosity / kinematic: no data available

Flow time: no data available

Vapour density: no data available

Evaporation rate: no data available

Solvent separation test: no data available

Solvent content: no data available

**9.2. Other information**

Solid content: no data available

no data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Vapours may form explosive mixtures with air.

The material can accumulate static charge and can therefore cause electrical ignition.

**10.2. Chemical stability**

Stable at normal ambient temperature and pressure.

**10.3. Possibility of hazardous reactions**

Hazardous reactions:

Oxidizing agents, Acid chlorides, Chromium oxides, metal oxides, Chromic acid, Alkaline earth metals, Alkali metals, Acid chlorides, Acid anhydrides,

**10.4. Conditions to avoid**

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Vapour/air-mixtures are explosive at intense warming.

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#### 10.5. Incompatible materials

Magnesium  
Zinc

#### 10.6. Hazardous decomposition products

Heating can release hazardous gases. Carbon monoxide Carbon dioxide (CO<sub>2</sub>) Formaldehyde

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

Toxic by inhalation, in contact with skin and if swallowed.

##### ATEmix calculated

ATE (oral) 100,1 mg/kg; ATE (dermal) 300,4 mg/kg; ATE (inhalation vapour) 10,01 mg/l; ATE (inhalation aerosol) 0,501 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-56-1	methanol				
	oral	LD50 mg/kg	5628	rat	
	dermal	LD50 mg/kg	17100	rabbits	
	inhalation (4 h) vapour	LC50	10 mg/l	rat	
	inhalation aerosol	ATE	0,5 mg/l		

##### Irritation and corrosivity

Irritating to skin and mucous membranes  
Has a degreasing effect on the skin.

##### Sensitising effects

No known effect.

##### Carcinogenic/mutagenic/toxic effects for reproduction

No known effect.

##### STOT-single exposure

H370 - Causes damage to organs.

##### STOT-repeated exposure

H372 - Causes damage to organs (a,b,c) through prolonged or repeated exposure.

##### Aspiration hazard

No aspiration toxicity classification

##### Specific effects in experiment on an animal

methanol:  
LD50/dermal/rabbit = 15800 mg/kg  
LD50/oral/rat = 5628 mg/kg

##### Practical experience

##### Other observations

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May be fatal or cause blindness if swallowed. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

##### Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 12: Ecological information

### 12.1. Toxicity

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
67-56-1	methanol					
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus (Bluegill sunfish)	
	Acute algae toxicity	ErC50 mg/l	22000	96 h	Pseudokirchneriella subcapitata (green algae)	
	Acute crustacea toxicity	EC50 mg/l	24500	48 h	Crustaceans	

### 12.2. Persistence and degradability

no data available

### 12.3. Bioaccumulative potential

no data available

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-56-1	methanol	-0,77

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

### 12.6. Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

In accordance with local and national regulations.

#### Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### Waste disposal number of contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### Contaminated packaging

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.



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#### SECTION 14: Transport information

##### Land transport (ADR/RID)

**14.1. UN number:** UN 1230  
**14.2. UN proper shipping name:** METHANOL solution  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3+6.1





Classification code: FT1  
Special Provisions: 279  
Limited quantity: 1 L  
Excepted quantity: E2  
Transport category: 2  
Hazard No: 336  
Tunnel restriction code: D/E

##### Inland waterways transport (ADN)

**Other applicable information (inland waterways transport)**  
Not tested

##### Marine transport (IMDG)



**14.1. UN number:** UN 1230  
**14.2. UN proper shipping name:** METHANOL  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3+6.1



Special Provisions: 279  
Limited quantity: 1 L  
Excepted quantity: E2  
EmS: F-E, S-D

##### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1230  
**14.2. UN proper shipping name:** METHANOL  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3+6.1



Special Provisions: A104 A113  
Limited quantity Passenger: 1 L  
Passenger LQ: Y341  
Excepted quantity: E2

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IATA-packing instructions - Passenger:	352
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

no data available

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 69: methanol

##### National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

1 - slightly water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

Revision: 24.05.2017

Safety datasheet sections which have been updated: 2, 3, 11, 15

Revision: 13.07.2015

Safety datasheet sections which have been updated: 2-16

#### 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. 3; H301	Calculation method
Acute Tox. 3; H311	Calculation method
Acute Tox. 3; H331	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 1; H370	Calculation method
STOT RE 1; H372	

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

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H315	Causes skin irritation.

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H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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