

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
 Creation Date: Mar. 21, 2022  
 Revision Date: Mar. 21, 2022

## 1. Identification

### 1.1 GHS Product identifier

**Product name** Dye solution A (Staining kit for spermatozoan morphology (Diff-quick rapid staining method) )

### 1.2 Other means of identification

**Product number** -  
**Other names** -

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** The kit is mainly used for evaluating the characteristics of human sperm morphology.  
**Uses advised against** no data available

### 1.4 Supplier's details

**Company** BRED Life Science Technology Inc.  
**Address** Block F, Dongbao Industrial Park, Shasi Community, Shajing Subdistrict, Bao'an District, Shenzhen, China  
**Telephone** +86 755 33929737

### 1.5 Emergency phone number

**Emergency phone number** +86 755 33929737  
**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral  
 Skin sensitization, Category 1  
 Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1  
 Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word**

Warning

**Hazard statement(s)**

H302 Harmful if swallowed  
 H317 May cause an allergic skin reaction  
 H400 Very toxic to aquatic life  
 H410 Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)**

**Prevention**

P264 Wash ... thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...  
 P273 Avoid release to the environment.

**Response**

P301+P317 IF SWALLOWED: Get medical help.  
 P330 Rinse mouth.  
 P302+P352 IF ON SKIN: Wash with plenty of water/...  
 P333+P317 If skin irritation or rash occurs: Get medical help.  
 P321 Specific treatment (see ... on this label).  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P391 Collect spillage.

**Storage**

none

**Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**2.3 Other hazards which do not result in classification**

no data available

---

**3. Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Water	Purified water	7732-18-5	231-791-2	>98%
Sodium azide	Sodium Azide	26628-22-8	247-852-1	<1%
Xanthene	Xanthene	92-83-1	202-194-4	<1%

---

**4. First-aid measures****4.1 Description of necessary first-aid measures****If inhaled**

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

**Following skin contact**

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

**Following eye contact**

Rinse with pure water for at least 15 minutes. Consult a doctor.

**Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

**4.2 Most important symptoms/effects, acute and delayed**

no data available

**4.3 Indication of immediate medical attention and special treatment needed, if necessary**

no data available

---

**5. Fire-fighting measures****5.1 Suitable extinguishing media**

Use dry chemical, carbon dioxide or alcohol-resistant foam.

**5.2 Specific hazards arising from the chemical**

no data available

**5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

---

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**6.2 Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

---

**7. Handling and storage****7.1 Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

**7.2 Conditions for safe storage, including any incompatibilities**

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

<b>Component</b>	Sodium Azide			
<b>CAS No.</b>	26628-22-8			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
<b>Canada - Ontario</b>			0,11 (1)	
<b>Italy</b>		0,1		0,3
<b>Singapore</b>			0,11 (1)	0,29
<b>Spain</b>			0,1	0,18
<b>USA - NIOSH</b>			0,1 (1)	0,3 (2)
	<b>Remarks</b>			
<b>Canada - Ontario</b>	(1) Ceiling limit value			
<b>Italy</b>	skin			
<b>Singapore</b>	(1) vapour			
<b>USA - NIOSH</b>	(1) Ceiling limit value (as HN3) (2) Ceiling limit value (as NaN3)			

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Colour</b>	no data available
<b>Odour</b>	no data available
<b>Melting point/freezing point</b>	pure CAS 7732-18-5: 0 °C; pure CAS 26628-22-8: 275 °C; pure CAS 92-83-1: 316°C(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	pure CAS 7732-18-5: 100°C(lit.); pure CAS 26628-22-8: 300 °C; pure CAS 92-83-1: 310-312°C(lit.)
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	pure CAS 7732-18-5: 100°C; pure CAS 26628-22-8: 300 °C; pure CAS 92-83-1: 56°C(lit.)
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	pure CAS 26628-22-8: Solubility in water, g/100ml at 17°C: 41.7 (good); pure CAS 92-83-1: In water: soluble
<b>Partition coefficient n-octanol/water</b>	no data available
<b>Vapour pressure</b>	pure CAS 7732-18-5: 3 mm Hg ( 37 °C); pure CAS 26628-22-8: 1 Pa(20°C)
<b>Density and/or relative density</b>	pure CAS 7732-18-5: 1.000g/ml at 3.98°C(lit.); pure CAS 26628-22-8: 1.85; pure CAS 92-83-1: 1.042 g/cm <sup>3</sup> (20°C)
<b>Relative vapour density</b>	pure CAS 7732-18-5: <1 (vs air)
<b>Particle characteristics</b>	no data available

## 10. Stability and reactivity

## 10.1 Reactivity

no data available

## 10.2 Chemical stability

no data available

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

---

## 11. Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

pure CAS 26628-22-8: The substance is mildly irritating to the eyes and upper respiratory tract. The substance may cause effects on the cardiovascular system and central nervous system. This may result in lowering of blood pressure, cardiac disorders and central nervous system disorders. Ingestion of large amounts could cause death. Inhalation of dust may cause asthma-like reactions (RADS).

### STOT-repeated exposure

no data available

### Aspiration hazard

pure CAS 26628-22-8: A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

---

## 12. Ecological information

### 12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Other adverse effects

no data available

---

## 13. Disposal considerations

## 13.1 Disposal methods

### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

---

## 14. Transport information

### 14.1 UN number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.2 UN Proper Shipping Name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.3 Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.4 Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.5 Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to IMO instruments

no data available

---

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Water	Purified water	7732-18-5	231-791-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Sodium azide	Sodium Azide	26628-22-8	247-852-1
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Xanthene	Xanthene	92-83-1	202-194-4
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.

<b>China Catalog of Hazardous chemicals 2015</b>	Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>	Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>	Listed.
<b>Vietnam National Chemical Inventory</b>	Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>	Not Listed.
<b>Korea Existing Chemicals List (KECL)</b>	Not Listed.

## 16. Other information

### Information on revision

**Creation Date** Mar. 21, 2022  
**Revision Date** Mar. 21, 2022

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)**

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
 Creation Date: Mar. 21, 2022  
 Revision Date: Mar. 21, 2022

## 1. Identification

### 1.1 GHS Product identifier

**Product name** Dye solution B (Staining kit for spermatozoan morphology (Diff-quick rapid staining method) )

### 1.2 Other means of identification

**Product number** -

**Other names** -

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** The kit is mainly used for evaluating the characteristics of human sperm morphology.

**Uses advised against** no data available

### 1.4 Supplier's details

**Company** BRED Life Science Technology Inc.

**Address** Block F, Dongbao Industrial Park, Shasi Community, Shajing Subdistrict, Bao'an District, Shenzhen, China

**Telephone** +86 755 33929737

### 1.5 Emergency phone number

**Emergency phone number** +86 755 33929737

**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word** Warning

**Hazard statement(s)**

H302 Harmful if swallowed

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)**

**Prevention**

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

**Response**

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P391 Collect spillage.

**Storage**

none

**Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### 2.3 Other hazards which do not result in classification

no data available

## 3. Composition/information on ingredients

### 3.1 Substances

Not applicable

## 3.2 Mixtures

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Water	Purified water	7732-18-5	231-791-2	>98%
Sodium azide	Sodium Azide	26628-22-8	247-852-1	<1%
3-amino-7-dimethylaminophenothiazin-5-ium chloride	Azure A	531-53-3	208-510-7	<1%
Methylthioninium chloride	Methylene blue	61-73-4	200-515-2	<1%

---

## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

---

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

### 5.2 Specific hazards arising from the chemical

no data available

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

---

## 6. Accidental release measures

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

---

## 7. Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

---

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values



<b>Component</b>	Sodium Azide			
<b>CAS No.</b>	26628-22-8			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
<b>Canada - Ontario</b>			0,11 (1)	
<b>Italy</b>		0,1		0,3
<b>Singapore</b>			0,11 (1)	0,29
<b>Spain</b>			0,1	0,18
<b>USA - NIOSH</b>			0,1 (1)	0,3 (2)
	<b>Remarks</b>			
<b>Canada - Ontario</b>	(1) Ceiling limit value			
<b>Italy</b>	skin			
<b>Singapore</b>	(1) vapour			
<b>USA - NIOSH</b>	(1) Ceiling limit value (as HN3) (2) Ceiling limit value (as NaN3)			

### Biological limit values

no data available

## 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

## 8.3 Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

### Thermal hazards

no data available

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Colour</b>	pure CAS 61-73-4: Dark green crystals or powder from chloroform-ethyl ether
<b>Odour</b>	pure CAS 61-73-4: Slight odor
<b>Melting point/freezing point</b>	pure CAS 7732-18-5: 0 °C; pure CAS 26628-22-8: 275 °C; pure CAS 531-53-3: 290°C (dec.); pure CAS 61-73-4: 243°C(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	pure CAS 7732-18-5: 100°C(lit.); pure CAS 26628-22-8: 300 °C; pure CAS 531-53-3: 442.8°C at 760 mmHg; pure CAS 61-73-4: 39°C(lit.)
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	pure CAS 7732-18-5: 100°C; pure CAS 26628-22-8: 300 °C; pure CAS 531-53-3: 221.6°C; pure CAS 61-73-4: 51°C(lit.)
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	pure CAS 26628-22-8: Solubility in water, g/100ml at 17°C: 41.7 (good); pure CAS 61-73-4: Soluble in ethanol, chloroform; slightly soluble in pyridine; insoluble in ethyl ether
<b>Partition coefficient n-octanol/water</b>	pure CAS 61-73-4: log Kow = 5.85 (est)
<b>Vapour pressure</b>	pure CAS 7732-18-5: 3 mm Hg ( 37 °C); pure CAS 26628-22-8: 1 Pa(20°C); pure CAS 61-73-4: 1.30X10 <sup>-7</sup> mm Hg at 25 deg C (est)
<b>Density and/or relative density</b>	pure CAS 7732-18-5: 1.000g/mL at 3.98°C(lit.); pure CAS 26628-22-8: 1.85; pure CAS 61-73-4: 1
<b>Relative vapour density</b>	pure CAS 7732-18-5: <1 (vs air)
<b>Particle characteristics</b>	no data available

## 10. Stability and reactivity

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

no data available

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

---

# 11. Toxicological information

## Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

## Skin corrosion/irritation

no data available

## Serious eye damage/irritation

no data available

## Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

## Carcinogenicity

no data available

## Reproductive toxicity

no data available

## STOT-single exposure

pure CAS 26628-22-8: The substance is mildly irritating to the eyes and upper respiratory tract. The substance may cause effects on the cardiovascular system and central nervous system. This may result in lowering of blood pressure, cardiac disorders and central nervous system disorders. Ingestion of large amounts could cause death. Inhalation of dust may cause asthma-like reactions (RADS).

## STOT-repeated exposure

no data available

## Aspiration hazard

pure CAS 26628-22-8: A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

---

# 12. Ecological information

## 12.1 Toxicity

- Toxicity to fish: pure CAS 61-73-4: LC50; Species: Lepomis macrochirus (Bluegill); Conditions: freshwater, static, 12 deg C, hardness 42 mg/L CaCO<sub>3</sub>; Concentration: 51000 ug/L for 24 hr (95% confidence interval: 40200-64800 ug/L)
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

## 12.5 Other adverse effects

no data available

---

# 13. Disposal considerations

## 13.1 Disposal methods

### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

---

## 14. Transport information

### 14.1 UN number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.2 UN Proper Shipping Name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.3 Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.4 Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.5 Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to IMO instruments

no data available

---

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Water	Purified water	7732-18-5	231-791-2
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Sodium azide	Sodium Azide	26628-22-8	247-852-1
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
3-amino-7-dimethylaminophenothiazin-5-ium chloride	Azure A	531-53-3	208-510-7
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.

<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Methylthioninium chloride	Methylene blue	61-73-4	200-515-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.

## 16. Other information

### Information on revision

<b>Creation Date</b>	Mar. 21, 2022
<b>Revision Date</b>	Mar. 21, 2022

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
Creation Date: Mar. 21, 2022  
Revision Date: Mar. 21, 2022

## 1. Identification

### 1.1 GHS Product identifier

**Product name** Fixation solution (Staining kit for spermatozoan morphology(Diff-quick rapid staining method) )

### 1.2 Other means of identification

**Product number** -

**Other names** -

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** The kit is mainly used for evaluating the characteristics of human sperm morphology.

**Uses advised against** no data available

### 1.4 Supplier's details

**Company** BRED Life Science Technology Inc.

**Address** Block F, Dongbao Industrial Park, Shasi Community, Shajing Subdistrict, Bao'an District, Shenzhen, China

**Telephone** +86 755 33929737

### 1.5 Emergency phone number

**Emergency phone number** +86 755 33929737

**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Flammable liquids, Category 2

Acute toxicity - Category 3, Oral

Acute toxicity - Category 3, Dermal

Acute toxicity - Category 3, Inhalation

Specific target organ toxicity – single exposure, Category 1

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word** Danger

**Hazard statement(s)**  
H225 Highly flammable liquid and vapour  
H301 Toxic if swallowed  
H311 Toxic in contact with skin  
H331 Toxic if inhaled  
H370 Causes damage to organs

**Precautionary statement(s)**

<b>Prevention</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...</p> <p>P264 Wash ... thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P260 Do not breathe dust/fume/gas/mist/vapours/spray.</p>
<b>Response</b>	<p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].</p> <p>P370+P378 In case of fire: Use ... to extinguish.</p> <p>P301+P316 IF SWALLOWED: Get emergency medical help immediately.</p> <p>P321 Specific treatment (see ... on this label).</p> <p>P330 Rinse mouth.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water/...</p> <p>P316 Get emergency medical help immediately.</p> <p>P361+P364 Take off immediately all contaminated clothing and wash it before reuse.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P316 IF exposed or concerned: Get emergency medical help immediately.</p>
<b>Storage</b>	<p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p>
<b>Disposal</b>	<p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.</p>

### 2.3 Other hazards which do not result in classification

no data available

## 3. Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Methanol	Methanol	67-56-1	200-659-6	>90%
Water	Purified water	7732-18-5	231-791-2	1%-5%
-	Diarylmethane	-	-	<1%

## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Fresh air, rest. Refer for medical attention.

#### Following skin contact

Rinse contaminated clothes (fire hazard) with plenty of water. Refer for medical attention .

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### Following ingestion

Do NOT induce vomiting. Give one or two glasses of water to drink. Refer immediately for medical attention.

### 4.2 Most important symptoms/effects, acute and delayed

Exposure to excessive vapor causes eye irritation, head- ache, fatigue and drowsiness. High concentrations can produce central nervous system depression and optic nerve damage. 50,000 ppm will probably cause death in 1 to 2 hrs. Can be absorbed through skin. Swallowing may cause death or eye damage. (USCG, 1999)

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treatment thresholds for methanol poisoning are based on case reports and published opinion. Most guidelines recommend treatment for a methanol level  $\geq$  20 mg/dL in a nonacidotic patient. No supportive data have been offered nor has the time of the exposure been addressed. For instance, no distinction has been drawn between a methanol level drawn 1 hr vs. 24 hr from ingestion. ...All published cases of methanol poisoning /were analyzed/ to determine the applicability of the 20 mg/dL threshold in a nonacidotic patient, specifically those arriving early for care (within 6 hr) with a peak or near-peak blood methanol concentration. ...Dating to 1879, 372 articles in 18 languages were abstracted using a standard format; 329 articles (2433 patients) involved methanol poisoning, and 70 articles (173 patients) met inclusion criteria. Only 22 of these patients presented for care within 6 hr of ingestion with an early methanol level. All but 1 patient was treated with an inhibitor of alcohol dehydrogenase (ADH). A clear acidosis developed only with a methanol level  $\geq$  126 mg/dL. The patient that did not receive an ADH inhibitor was an infant with an elevated early methanol level (46 mg/dL) that was given folate alone and never became acidotic. Intra- and inter-rater reliability were 0.95. Nearly all reports of methanol poisoning involve acidotic patients far removed from ingestion. The small amount of data regarding patients arriving early show that 126 mg/dL is the lowest early blood methanol level ever clearly associated with acidosis. Contrary to conventional teaching, there are case reports of acidosis after only a few hours of ingestion. The data are insufficient to apply 20 mg/dL as a treatment threshold in a nonacidotic patient arriving early for care.

---

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media

If material on fire or involved in fire: Do not extinguish fire unless flow can be stopped. Use water in flooding quantities as fog. Solid streams of water may be ineffective. Cool all containers with flooding quantities or water. Apply water from as far a distance as possible. Use "alcohol" foam, dry chemical or carbon dioxide.

### 5.2 Specific hazards arising from the chemical

Highly flammable. Vapour/air mixtures are explosive. Risk of fire and explosion on contact with incompatible substances. See Notes.

### 5.3 Special protective actions for fire-fighters

Use water spray, powder, alcohol-resistant foam, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

---

## 6. Accidental release measures

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

Evacuate danger area! Consult an expert! Remove all ignition sources. Ventilation. Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT wash away into sewer. Collect leaking and spilled liquid in covered containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Wash away remainder with plenty of water. Store and dispose of according to local regulations.

### 6.2 Environmental precautions

Personal protection: chemical protection suit including self-contained breathing apparatus. Evacuate danger area! Ventilation. Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water. Remove vapour with fine water spray.

### 6.3 Methods and materials for containment and cleaning up

General Spill Actions: Stop or reduce discharge of material if this can be done without risk. Eliminate all sources of ignition. Avoid skin contact and inhalation. A fluorocarbon water foam can be applied to the spill to diminish vapor and fire hazard. Hycar and carbopol, which are absorbent materials, have shown possible applicability for vapor suppression and/or containment of methanol in spill situations. Leaking containers should be removed to the outdoors or to an isolated, well-ventilated area and the contents transferred to other suitable containers. The following materials are recommended for plugging leaks of methanol: polyester (eg Glad bag), imid polyester (eg brown-in-bag), stafoam urethane foam, sea-going epoxy putty, and MSA urethane.

---

## 7. Handling and storage

### 7.1 Precautions for safe handling

NO open flames, NO sparks and NO smoking. NO contact with incompatible substances. Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools.

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

Separated from incompatible materials. Cool. Fireproof. Keep in a well-ventilated room.

---

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

TLV: 200 ppm as TWA; 250 ppm as STEL; (skin); BEI issued.EU-OEL: 260 mg/m<sup>3</sup>, 200 ppm as TWA; (skin).MAK: 130 mg/m<sup>3</sup>, 100 ppm; peak limitation category: II(2); skin absorption (H); pregnancy risk group: C

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear face shield or eye protection in combination with breathing protection.

#### Skin protection

Protective gloves. Protective clothing.

#### Respiratory protection

Use ventilation. Use local exhaust or breathing protection.

### Thermal hazards

no data available

---

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Colour</b>	pure CAS 67-56-1: Colourless.
<b>Odour</b>	pure CAS 67-56-1: Alcoholic odor; pungent odor when crude
<b>Melting point/freezing point</b>	pure CAS 67-56-1: -98°C; pure CAS 7732-18-5: 0 °C
<b>Boiling point or initial boiling point and boiling range</b>	pure CAS 67-56-1: 65°C; pure CAS 7732-18-5: 100°C(lit.)
<b>Flammability</b>	pure CAS 67-56-1: Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.
<b>Lower and upper explosion limit/flammability limit</b>	pure CAS 67-56-1: Lower flammable limit: 6.0% by volume; Upper flammable limit: 36% by volume
<b>Flash point</b>	pure CAS 67-56-1: 9°C c.c.; pure CAS 7732-18-5: 100°C
<b>Auto-ignition temperature</b>	pure CAS 67-56-1: 440°C
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	pure CAS 67-56-1: dynamic viscosity (in mPa s) = > 0.544 - < 0.59. Temperature: 25.0°C.
<b>Solubility</b>	pure CAS 67-56-1: Solubility in water: miscible
<b>Partition coefficient n-octanol/water</b>	pure CAS 67-56-1: -0.74
<b>Vapour pressure</b>	pure CAS 67-56-1: 12.9 kPa(20°C); pure CAS 7732-18-5: 3 mm Hg ( 37 °C)
<b>Density and/or relative density</b>	pure CAS 67-56-1: 0.79; pure CAS 7732-18-5: 1.000g/mL at 3.98°C(lit.)
<b>Relative vapour density</b>	pure CAS 67-56-1: 1.11 (vs air); pure CAS 7732-18-5: <1 (vs air)
<b>Particle characteristics</b>	no data available

---

## 10. Stability and reactivity

### 10.1 Reactivity

Reacts violently with oxidants. This generates fire and explosion hazard.

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

The vapour mixes well with air, explosive mixtures are easily formed. Reacts violently with strong oxidants, acids and reducing agents. This generates fire and explosion hazard.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Distillation of mixtures with C1-C3 alcohols gives highly explosive alkyl perchlorates. Barium perchlorate

### 10.6 Hazardous decomposition products

When heated to decomposition it emits acrid smoke and irritating fumes.

---

## 11. Toxicological information

### Acute toxicity

- Oral: pure CAS 67-56-1: LD0 - rat -  $\geq$  2 528 mg/kg bw. Remarks: Application as 50% aqueous solution.
- Inhalation: pure CAS 67-56-1: LC50 - cat - 43.68 mg/L air.
- Dermal: pure CAS 67-56-1: LD50 - rabbit - 17 100 mg/kg bw.

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity



No information is available on the reproductive or developmental effects of methanol in humans. Developmental effects have been observed in the offspring of rats and mice exposed to methanol by inhalation. These included skeletal, cardiovascular, urinary system, and central nervous system (CNS) malformations in rats and increased resorptions and skeletal and CNS malformations in mice.

### STOT-single exposure

pure CAS 67-56-1: The substance is irritating to the eyes, skin and respiratory tract. The substance may cause effects on the central nervous system. This may result in loss of consciousness. Exposure could cause blindness and death. The effects may be delayed. Medical observation is indicated.

### STOT-repeated exposure

pure CAS 67-56-1: Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the central nervous system. This may result in persistent or recurring headaches and impaired vision.

### Aspiration hazard

pure CAS 67-56-1: A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

---

## 12. Ecological information

### 12.1 Toxicity

- Toxicity to fish: pure CAS 67-56-1: LC50 - *Lepomis macrochirus* - 15 400 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: pure CAS 67-56-1: EC50 - *Daphnia magna* - 18 260 mg/L - 96 h.
- Toxicity to algae: pure CAS 67-56-1: EC50 - *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*) - ca. 22 000 mg/L - 96 h.
- Toxicity to microorganisms: pure CAS 67-56-1: IC50 - activated sludge from domestic and industrial sewage treatment plants - > 1 000 mg/L - 3 h.

### 12.2 Persistence and degradability

AEROBIC: The half-life for methanol applied to a sandy loam from Mississippi (68% sand, 23.4% silt, 8.6% clay, 0.94% organic carbon, pH 4.8) was 3.2 days. The half-life of methanol applied to a sandy silt loam from Texas (61.5% sand, 31.1% silt, 7.4% clay, 3.28% organic carbon, pH 7.8) was 1 day. The moisture content of each soil was maintained at approximately 80% of its field capacity over the 64 day incubation period, and the half-lives did not account for any potential volatilization loss(1).

### 12.3 Bioaccumulative potential

Fish (golden ide (*Leuciscus idus melanotus*)) exposed to 0.05 mg/L of methanol for three days in an aquatic tank had measured BCF values of less than 10(1). According to a classification scheme(2), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

### 12.4 Mobility in soil

The measured Koc for methanol is reported to be 2.75(1). According to a classification scheme(2), this estimated Koc value suggests that methanol is expected to have very high mobility in soil(SRC).

### 12.5 Other adverse effects

no data available

---

## 13. Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

---

## 14. Transport information

### 14.1 UN number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.2 UN Proper Shipping Name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.3 Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.4 Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.5 Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to IMO instruments

no data available

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Methanol	Methanol	67-56-1	200-659-6
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Water	Purified water	7732-18-5	231-791-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.
Chemical name	Common names and synonyms	CAS number	EC number
-	Diarylmethane	-	-
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Not Listed.

## 16. Other information

### Information on revision

**Creation Date** Mar. 21, 2022

**Revision Date** Mar. 21, 2022

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

### **Other Information**

Burns with nonluminous bluish flame. Depending on the degree of exposure, periodic medical examination is suggested. Specific treatment may be necessary in case of poisoning with this substance; the appropriate means with instructions should be available.

**Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)**

---

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*