

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Fehling's Solution (B)
Japanese Pharmacopoeia Test Solution
Product code : JPHTS255(B)

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

Use of the substance/mixture : Laboratory chemical

1.3. Details of the supplier of the safety data sheet

Spectracer UK Ltd.

Second Floor,
27 Gloucester Place,
London,
W1U 8HU,
United Kingdom.

Tel: +44 (0) 207 193 9114
Fax: +44 (0) 203 432 4686
Email: contact@spectracer.co.uk
Web: www.spectracer.com

1.4. Emergency telephone number

Emergency number : Tel: +44(0)1933445260 Option 1. Language: English only.
For Chemical Emergencies Only
Llewellyn (Safety Advisors) Europe Ltd

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H314
Category 1A

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center/doctor/...
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to ..

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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
sodium hydroxide	(CAS No) 1310-73-2	5 - 15	Skin Corr. 1A, H314 Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

- Symptoms/injuries after skin contact : Burns.
- Symptoms/injuries after eye contact : Serious damage to eyes.
- Symptoms/injuries after ingestion : Burns.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide (1310-73-2)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Mixture contains one or more component(s) which have the following colour(s):
White or colourless White
- Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
Odorless
- Odor threshold : No data available
- pH : No data available
- Melting point : Not applicable
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Not applicable.
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : Miscible with water.
- Log Pow : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

sodium hydroxide (1310-73-2)

LC50 fish 1	45.4 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
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12.2. Persistence and degradability

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sodium hydroxide (1310-73-2)	
Persistence and degradability	Biodegradability: Not applicable. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

sodium hydroxide (1310-73-2)	
Bioaccumulative potential	Bioaccumulation: No data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
 GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Waste disposal recommendations : Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.
 Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1824 Sodium hydroxide solution, 8, III
 UN-No.(DOT) : UN1824
 Proper Shipping Name (DOT) : Sodium hydroxide solution
 Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
 Packing group (DOT) : III - Minor Danger
 Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
 DOT Packaging Bulk (49 CFR 173.xxx) : 241
 DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)
 N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material
 T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
 TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling
 DOT Packaging Exceptions (49 CFR 173.xxx) : 154
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

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DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel

DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.

TDG

Transport document description : UN1824 SODIUM HYDROXIDE SOLUTION, 8, III

UN-No. (TDG) : UN1824

Proper Shipping Name (TDG) : SODIUM HYDROXIDE SOLUTION

TDG Primary Hazard Classes : 8 - Class 8 - Corrosives

Packing group : III - Minor Danger

Explosive Limit and Limited Quantity Index : 5 L

Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 5 L

Transport by sea

UN-No. (IMDG) : 1824

Proper Shipping Name (IMDG) : SODIUM HYDROXIDE SOLUTION

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Air transport

UN-No. (IATA) : 1824

Proper Shipping Name (IATA) : Sodium hydroxide solution

Class (IATA) : 8 - Corrosives

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

sodium hydroxide (1310-73-2)	
CERCLA RQ	1000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date : 10/30/2016

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Full text of H-phrases:

H314	Causes severe skin burns and eye damage
H402	Harmful to aquatic life

NFPA health hazard

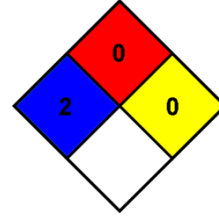
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 0 Minimal Hazard - Materials that will not burn

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.