MATERIAL SAFTY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification: **Test kit for Formalin in food**
Manufacture: Government Pharmaceutical Organization Thailand.
Exported / Distributor by:
ASIANMEDIC CO.,LTD.
60/3 Soi Inthamara 40, Ratchadaphisek, Dindaeng, Bangkok 10400, Thailand
Hotline: 669-0898-5188, 668-9185-8999
www.asianmedic.com

SECTION 2 - HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).
However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

Hazard classification and indication: --

2.2 Label elements.

Hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal word: --

Hazard statements:

EUH031	Contact with acids liberates toxic gas.
EUH210	Safety data sheet available on request.

Precautionary statements: --

Contains: SODIUM SULFITE

Nr. EC: 231-821-4

This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

2.3 Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

SECTION 3 - COMPOSITION/ INFOMRATION ON INGREDIENTS

3.1 Substances.

Cotains:

Identification.	**X = Conc. %**	**Classification 1272/2008 (CLP).**
SODIUM SULFITE		
CAS. 7757-83-7	100	EUH031
EC. 231-821-4		
INDEX.		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

3.2 Mixtures.
Information not relevant.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures.
Not specifically necessary. Observance of good industrial hygiene is recommended.

4.2 Most important symptoms and effects, both acute and delayed.
No episodes of damage to health ascribable to the product have been reported.

4.3 Indication of any immediate medical attention and special treatment needed.
Information not available.

SECTION 5 - FIRE FIGHTING MEASURS

5.1 Extinguishing media.
SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2 Special hazards arising from the substance or mixture.
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

5.3 Advice for firefighters.
GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6 - ACCIDIENT RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.
If there are no contraindications, spray powder with water to prevent the formation of dust.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions.
The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up.

Collect the leaked product and place it in containers for recovery or disposal. Of the product is flammable, use explosion-proof equipment.
If there are no contraindications, use jets of water to eliminate product residues.
Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other section.

Any information on personal protection and disposal is given in section 8 and 13.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2 Conditions for safe storage, including any incompatibilities.

Keep the product clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details

7.3 Specific end use (s).

Information not available.

SECTION 8 - EXPOSURE CONTROL/ PERSONAL PROTECTION

8.1 Control parameters.

SODIUM SULFITE

Predicted no-effect concentration-PNEC.

Normal value in fresh water	1.33	mg/l
Normal value in marine water	0.13	mg/l

Health-Derived no-effect level – DNEL/DMEL

	Effects on consumers.				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	11 mg/kg bw/d				
Inhalation.			VND	88 mg/m3			VND	298 mg/m3

8.2 Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.
If the product may or must come into contact or react with acids, suitable technical and / or organisational measures should be taken to prevent the development of toxic and/or inflammable gases.
HANDPROTECTION
In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions
SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686 / EEC and standard EN ISO20344). Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight Protective goggles (see standard EN166).
RESPIRATORY PROTECTION

Use a type P filtering facemask (see standard EN 149) or equivalent device, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment.
ENMRONMENTAL EXPOSURE CONTROLS.
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical properties.

Appearance	Solid powder
Colour	White
Odour	Pungent
Odour threshold.	Not available
pH.	9.5-9.8 pH, 25 g/L
Melting point / freezing point	Not available.
Initial boiling point.	Not applicable.
Boiling range.	Not available.
Flash point.	Not applicable.
Evaporation rate	Not available.
Flammability (solid gas)	Not available.
Lower inflammability limit	Not available.
Upper inflammability limit	Not available.
Lower explosive limit	Not available.
Upper explosive limit	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	2.600
Solubility	Soluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decompostition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2 Other information.

Molecular weight.	126.040
Total solids (250°c / 482°F)	100.00%
VOC (Directive 2010/75/EC)	0
VOC (volatile carbon)	0

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability.

The product is stable in normal conditions of use and storage

10.3 Possibility of hazardous reactions.

The powders are potentially explosive When mixed with air.

SODIUM SULFATE
Violent reactions possible with: nitrites, Exothermic reaction with: Oxidizing agents, Generates dangerous gases or fumes in contact with acids.

10.4 Conditions to avoid.
Avoid environmental dust build-up.

10.5 Incompatible materials.
Information not available.

10.6 Hazardous decomposition products,
Information not available.

SECTION 11 - TOXICOLOGICAL INFORMATION

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substance it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1 Information on toxicological effects.
ACUTE TOXICITY.

LC50 (Inhalation-vapours) of the mixture:	Not dassified (no significant component),
LC50 (Inhalation-mists / powders) of the mixture:	Not dassified (no significant component),
LD50 (Oral) of the mixture:	Not dassified (no significant component),
LD50 (Dermal) of the mixture:	Not dassified (no significant component),

SOIUM SULFITF
LD50 (Oral). 2610. Mg/kg Rat

SKIN CORROSIONT IRRITATION.
Does not meet the classification criteria for this hazard class.

SERIOUS EYE DAMAGE JIRRITATION.
Does not meet the classification criteria for this hazard class.

RESPIRATORY OR SKIN SENSITISATION.
Does not meet the classification criteria for this hazard class.

GERM CELL MUTAGENICITY.
Does not meet the classification criteria for this hazard class.

CARCINOGENCITY.
Does not meet the classification criteria for this hazard class.

REPRODUCTIVE TOXICITY.
Does not meet the classification criteria for this hazard class.

STOT – SINGLE EXPOSURE.
Does not meet the classification criteria for this hazard class.
STOT – PEPEATED EXPOSURE.
Does not meet the classification criteria for this hazard class.

ASPIPATION HAZARD.
Does not meet the classification criteria for this hazard class.

SECTION 12 - ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity.
SODIUM SULFITE
LC50 – for Fish. 315 mg/l/96h Leociscus idus

12.2 Persistence and degradability.
SODIUM SULFITE
Solubility in water > 10000 mg/l
Biodegradability: Information not available.

12.3 Bioaccumulative potential.
SODIUM SULFITE
Partition coefficient: n-octanol/water -4 Log Kow

12.4 Mobility in soil.
Information not available.

12.5 Results of PBT and vPvB assessment.
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6 Other adverse effects.
Information not available.

SEATION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods.
Reuse, when possible. Neat product residues should be considered spedal non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14 - TRANSPORT INFORMATION

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RD), of the international dangerous Goods Code (TMDG), and of the International Air Transport Association (IATA) regulations.

14.1 UN number.
Not applicable.

14.2 UN proper shipping name.
Not applicable.

14.3 Transport hazard class(es).
Not applicable.

14.4 Packing group.
Not applicable.

14.5 Environmental hazards.
Not applicable.

14.6 Special precautions for user.
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and IBC Code.
Information not relevant.

SECTION 15 - REGULATORY INFORMATION

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

Seveso Category – Directive 2012/18/EC:
None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
None.

Substances in Candidate List (Art. 59 REACH).
On the available data, the product does not contain any SVHC in percentage greater than 0, 1%.

Substances subject to authorisation (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None.

Substances subject to the Rotterdam Convention:
None.

Substances subject to the Rotterdam Convention:
None.

Healthcare controls.
Information not available

German regulation on the classification of substances hazardous to water (wwS2005).
WGK 1: Low hazard to water
Substance listed in Annex 2.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16 - OTHER INFORMATION

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

EUH031	Contact with acids liberates toxic gas.
EUH210	Safety data sheet available on request.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration

- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLVCEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWASTEL: Short term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- The Merck Indek. – 10th Edition
- Handling Chemical Safety
- INRS – Fiche Toxicologique (toxicological sheet)
- Patty – Industrial Hygiene and Toxicology
- N.I. Sax – Dangerous properties of Industrial Material-7, 1989 Edition
- ECHA website

Note for users:
The information contained in the present sheet are based on our own knowledge on the date last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:
The following sections were modified:
09.