



SAFETY DATA SHEET

0.02 M KMno4**1. Identification of the substance and of the supplier****Product identifier**

Chemical name 0.02 M KMno4

Recommended use of the chemical and restrictions on use

-

Manufacturer/ supplier details

Company name **Ya Thai Chemical Co., Ltd.**
 Company address 78/9 Moo 5 Takam, Bangpakong,
 Chachoengsao 24130 THAILAND

Phone number 66-3857-4400
 Fax 66-3857-3700
 Emergency phone number -

2. Hazard Identification**GHS classification of the substance/ mixture****Environmental hazards**

Hazardous to the aquatic environment - long term (chronic) Category 3

Other hazard than mentioned above are "Not classified", "Classification not possible" or "Not applicable".

GHS label elements

Pictogram No symbol
Signal word No signal word

Hazard statements

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements**Prevention**

P273 Avoid release to the environment.

Disposal

P501 Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.

3. Composition/ Information on Ingredients

Substance/ mixture	Mixture (liquid)	CAS No.	Concentration %
Components			
Potassium permanganate		7722-64-7	0.25-1

4. First Aid Measures**Description of first aid measure**

Inhalation

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact

Wash off with soap and plenty of water. Consult a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion

Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

In case of fire in the surroundings, use appropriate extinguishing media.

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

Unsuitable extinguishing media

No information available.

Special hazards arising from the substance or mixture

Gives off irritating or toxic fumes (or gases) in a fire.

When heated to decomp it emits irritating fumes of potassium oxides, heavy metal oxides.

Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus (SCBA) for firefighting.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

After contact with skin, wash immediately with plenty of soap and water.

Environmental precautions

Do not let product enter drains. Keep water away from release.

Stop or control the leak, if this can be done without undue risk.

Methods and materials for containment and cleaning up

Liquid form, collect for reclamation or absorb in vermiculite, dry sand, earth, or a similar material.

For small spills, add absorbent or sand, scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and Storage

Precautions for safe handling

Use personal protective equipment.

Avoid contact with eyes.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure Controls/ Personal Protection

Control parameters

Component	ACGIH (TLV)	NIOSH (REL)	OSHA (PEL)
Potassium permanganate 7722-64-7	-	-	-

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

NIOSH: The National Institute for Occupational Safety and Health

Appropriate engineering controls

Use ventilation, local exhaust ventilation.

Personal protective equipment

Respiratory protection Not applicable.

Skin protection Not applicable.

Eye/ face protection Safety glasses.

Body protection Not applicable.

Work/ hygienic practices

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance and colour	Liquid, dark violet
Odour	Odourless
Odour threshold	Not available
pH	6.80-8.50
Freezing point	Not available
Initial boiling point and boiling range	> 100 °C
Flash point	Not flammable
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	1.00-1.10 at 25 °C
Water solubility	Soluble in water
Partition coefficient: n-octanol/water log Pow	Not available
Auto ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available

10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Will not occurred.

Conditions to avoid

Not available.

Incompatible materials

Strong reducing agents. Strong acids. Strong bases.

Hazardous decomposition products

When heated to decomp it emits irritating fumes of potassium oxides, heavy metal oxides.

11. Toxicological Information**Numerical measures of toxicity**

Classification of health hazards

Acute toxicity

Acute oral toxicity

Not classified.

Acute dermal toxicity

Not classified.

Acute inhalation toxicity

Not classified.

Skin corrosion/ irritation

All ingredients in this mixture are not skin corrosion/ irritation effect.

Serious eye damage/ eye irritation

All ingredients in this mixture are not serious eye damage/ eye irritation effect

Respiratory or skin sensitization

All ingredients in this mixture are not respiratory or skin sensitization effect.

Germ cell mutagenicity

All ingredients in this mixture are not germ cell mutagenicity effect.

Carcinogenicity

All ingredients in this mixture are not carcinogenicity effect.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
Potassium permanganate 7722-64-7	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity

All ingredients in this mixture are not reproductive toxicity effect.

Specific target organ toxicity (single exposure)

All ingredients in this mixture are not specific target organ toxicity effect (single exposure).

Specific target organ toxicity (repeated exposure)

All ingredients in this mixture are not specific target organ toxicity effect (repeated exposure).

Aspiration hazard

All ingredients in this mixture are not aspiration hazard effect.

12. Ecological Information**Ecotoxicity**

Acute (short-term) aquatic hazard

Classified not possible

Long-term aquatic hazard

H413 May cause long lasting harmful effects to aquatic life.

Persistence and degradability

Not available

Bio-accumulative potential

Not available

Mobility in soil

Not available

Other adverse effects

Not available

Environmental effects

Not available

13. Disposal Consideration**Waste treatment methods**

Dispose in accordance with local/ national/ international regulations.

Contaminated packaging

Dispose of as unused product.

Dispose of container in accordance with local/ national/ international regulations.

14. Transport Information

International regulation

UN number	Not available
UN proper shipping name	Not available
Transport hazard class	Not available
Packaging group	Not available
Environmental hazards	Not available
Transport in bulk	Not available
Special precautions for user	Not available

15. Regulatory Information

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

Thailand

Notification of Ministry of Industry Subject: This chemical not listed on the hazardous substances inventory.
List of hazardous substances B.E. 2556 (2013) (Annex 5.1)

Thailand

Notification of Ministry of Labour Subject: This chemical not listed on the hazardous substances inventory.
Subject: List of hazardous chemicals B.E. 2556 (2013)

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

16. Other Information

Created November 28, 2023

Reference

- 1) GHS Classification Data from NIH (National Institutes of Health) Web Site:
<https://pubchem.ncbi.nlm.nih.gov/>
- 2) Thailand: Notification of Ministry of Industry Subject: List of hazardous substances B.E. 2556 (2013) (Annex 5.1)
- 3) Thailand: Notification of Ministry of Labour Subject: List of hazardous chemicals B.E. 2556 (2013)

NOTE:

This information herein is given in good faith, but no warranty, express or implied, is made. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used in caution. Although certain hazards are described herein. We cannot quarantine that These are the only hazards which exist.