



Material Safety Data Sheet

PRODUCT NAME: rhCK-MM

1. Product and business enterprise information

[Name of chemical/product]

Chemical name of hazard: Not applicable

Product name of hazard: Not applicable

Chemical substance name: Creatine kinase

Commercial product name: rhCK-MM

Source of product: Human

Host cell of product: *E. coli*.

EC No.: 2.7.3.2

CAS No.: Not available

[Composition of product]

Ingredients; rhCK-MM Protein \geq 2mg / mL, containing 2-mercaptoethanol

[Intended use]: For laboratory use only.

[Information on MSDS provider]

Name: Oriental Yeast Co., Ltd.

Address: 3-6-10 Azusawa, Itabashi-ku, TOKYO 174-8505 JAPAN

Department in charge: Bioindustry division

Telephone: + 81-(0)3-3968-1192 Fax: + 81-(0)3-3968-4863

In case of questionnaire of product:

QA section of Nagahama Branch, Telephone: +81-(0)749-64-2346 Fax: +81-(0)749-63-7910

2. Summary of hazards & toxicity

[Hazards]: Not found

[Toxicity]: Not found

[Fire risk]: Not found

[Explosion risk]: Not found

[Health risk]: Not found

(Notes; There is no available information that the product has hazardous properties.)

3. Information on chemical content and structure of hazard

[Name and content level of chemicals found]

Chemical name of hazard	CAS No.	EINECS No.	UN No.	No. of A*	No. of B*	Content % (w/v)
Ethanol, 2-mercapto-(2-Mercaptoethanol)	60-24-2	200-464-6	2966 Class 6.1	2-458	2-458	0.08

A*; Class Reference Number in The Gazetted List

B*; Number of Substances Chemical Control Law in Japan



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4. First aid measures

[Inhalation]

Clean nose by blowing. Move to an outside area and breathe fresh air. Seek medical advice.

[Skin contact]: Wash thoroughly with soap and water. Seek medical advice.

[Eye contact]

Rinse with copious amounts of fresh water or a recommended eye bath solution. Seek medical advice.

[Swallowing]: Rinse mouth thoroughly and drink plenty of water. Seek medical advice.

5. Measures in case of fire

[Fire extinguishing method and appropriate extinguisher]: Not restricted

[Protection for persons extinguishing fire]

Not restricted. Dangerous decomposition is not anticipated.

6. Measures in case of leakage

[Warning in persons]

Use safety glasses, goggles, rubbers, latex protective gloves or dust mask, if necessary.

[Warning in environment]: not found

[Removal method]

Use normal clean up procedures for spillage and wash thoroughly with excess water.

[Warning in removal; prevention of secondary damage]

Avoid physical contact during removal. Dispose the waste down through drainage system with copious amounts of water.

7. Warning in handling and storage

[Warning in handling]

The product itself does not burn. But a well ventilated area is recommended for handling of the product.

[Ventilation, prevention of steam or dust production, etc.]

A well ventilated area is recommended for handling of the product.

[Prevention of mixing, contact, falling, etc.]: Not restricted

[Warning in storage]: Store in the dark. Keep off humidity.

[Storage environment such as temperature and humidity]

Store at below -80°C.

[Structure of storage space]: Not restricted



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8. Measures for explosion prevention and protection

[Facility measures]: Not restricted

[Facility sealing and washing facility]

Facility sealing is not applicable. Wash facility by normal clean up procedures.

[Protective equipment]

Not applicable. Ventilated room is recommended.

[Use of masks, gloves, goggles, etc.]

Dust mask is recommended even though no personal respiratory protective equipment is strongly required. Use of safety glasses, goggles, rubbers or latex protective gloves is recommended. Wash hands before breaks and at the end of workday.

[Tolerable concentration level]: Not applicable

[Concentration level permitted under Industrial Safety and Health Law]: Not applicable

[Hygiene]: Wash hands before breaks and at the end of work.

9. Physical and chemical properties

[Form, color and odor]: Transparent clear solution

[Boiling point and melting point]: Not found

[Flash point and ignition point]: Not found

[Volatility]: Not found

[Vapor pressure and density]: Not found

[Solubility (water, solvent, etc.)]: Not applicable

[Formula weight and the formula]: Not applicable

10. Stability and reactivity

[Stability]: Stable under freezing condition

[Conditions to be avoided]: Avoid from direct irradiation of sunlight and high temperature

[Materials to be avoided]: Not found

[Hazardous substances that may be produced]: Not found

11. Hazard information

[Carcinogenicity, transformability, chronic toxicity in case of oral intake, chronic toxicity in case of air intake, reproductive or generative toxicity, sensitization, acute toxicity, irritancy, etc.]

Inhalation: Not found

Skin: Not found

Oral: Not found

Mutagenic effects: Not found

Reproductive toxicity: Not found



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12. Environmental impact information

[Ecological toxicity]: Not found

[Biodegradability, transferability in the environment, accumulation in plant or animal life]
Not found.

[Environmental standards]: Not found

13. Warning in case of disposal

[Method of disposal]: Not restricted

[Laws and regulations to be observed in case of disposal]: Not found

[Method of treating used containers]

Dispose of empty containers via local recycling or waste disposal routes, if necessary, clean them before hand.

[Caution in case of neutralization, incineration, etc.]: Not found

14. Warning in transport

[Container structure, preventing falling in freight transport, etc.]: Not restricted

[International standards on transport]

Not applicable. The product is not subject to current regulations for transportation of hazardous goods (ADR/RID, IMDG, IATA/ICAO)

15. Applicable laws and regulations

[Appendix XX, Class I Designated Chemical Substances, Law Concerning the Reporting, etc. of Release in to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management]

The product is subject to Chemical Substances Control and MSDS Laws in Japan.

[Other applicable laws such as Industrial Safety and Health Law, Poisonous and Deleterious Substances Control Law, Agricultural Chemicals Regulation Law, etc.]

Not found

[Labeling]:

The product has to be notified on the label which contains hazardous chemical in accordance with laws in Japan. The chemical is also classified in UN class 6.1. It is recommended notification on the label though the amount of the chemical is small and it is not found that the product is subject of regulation of transport.

16. Others

[Date of production & revision]: Expiry date is notified on label.

[Others]

The statement above is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our product is responsible for enduring that, where applicable, existing laws and guidelines are observed.

End of the content