Material Safety Data Sheet

1. Product and company identification

Product name	:	Formate ion standard solution(10mg/m l)
Name of manufacturer	:	KANTO CHEMICAL CO., INC.
Address	:	2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
Name of section	:	Reagent division, catalog and products information section
Telephone number	:	+81-3-6214-1090
Facsimile number	:	+81-3-3241-1047
Mail address	:	BC32@gms.kanto.co.jp
MSDS No.	:	16229

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable liquids	:	Out of category
Pyrophoric liquids	:	Out of category
Corrosive to metals	:	Out of category

Human health hazard

Acute toxicity(oral)	:	Out of category
Acute toxicity(dermal)	:	Out of category
Skin corrosion・Irritation	:	Out of category
Serious eye damage・Eye irritation	:	Out of category

3. Composition/Information on ingredients

Substance/Mixture	:	Substance
Chemical name or commercial name	:	Sodium formate, water
Ingredients and composition	:	Water solution contains 1.51%(as formate ion 10mg/ml) sodium formate.
Chemical formula	:	HCOONa
CAS No.	:	141-53-7
TSCA Inventory	:	Registered
EINECS No.	:	2048238

4. First aid measures

Inhalation	:	Remove the victim to fresh air, and make him blow his nose and gargle.
Skin contact	:	Wash the affected areas under running water.

Eye contact : Gently rinse the affected eyes with clean water for at least 15 minutes. If necessary, get medical treatment.

Ingestion : Give the victim water. If necessary, get medical attention.

5. Fire fighting measures

Extinguishing media : This product is noncombustible.

Prohibited extinguishing media

: None

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters

: Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper protective equipment and avoid contact with skin.

Cautions for environment : Attention should be given not to cause damage to the environment by flowing of spillage to rivers. In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.

Removal measure : Absorb spill with paper or cloth.

7. Cautions of handling and storage

Handling

Engineering measures : If necessary, wear proper protective equipment not to contact with skin.

Cautions for safety handling

: Handle the chemical not to generate vapor.

Storage

Adequate storage condition

: Store in a dark, cool place and tightly closed.

Safety adequate container materials

: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Use with local exhaust ventilation in case of generating vapor.

Control parameters

ACGIH(2009) : Not established

Protective equipment

Respiration protective equipment

: Not necessary

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

Appearance : Liquid

Color	:	Colorless
Odor	:	Odorless
pH	:	Neutral
Boiling point	:	Approx. 100℃
Melting point	:	Approx. 0℃
Flash point	:	Noncombustible
Specific gravity	:	Approx. 1.0g/ml(20℃)
Solubility		
Solubility in solvents	:	Water ; Freely soluble

10. Stability and reactivity

Stability	:	Stable under normal usage.
Reactivity	:	Nothing particular
Incompatible conditions	:	Light, heat
Hazardous decomposition products	:	Carbon monoxide

11. Toxicological information

Acute toxicity	:	Oral : Out of category Dermal : Out of category Inhalation(vapor) : Not possible to classify because of insufficient data. Inhalation(dust, mist) : Not possible to classify because of insufficient data. (as Sodium formate) mouse oral LD50=11200mg/kg
Skin corrosiveness	:	Out of category Sodium formate has slight irritation of skin, but the product is low-concentrated water solution of the substance, the classification is out of category.
Irritation to skin, eyes	:	Out of category Sodium formate has slight irritation of eyes, but the product is low-concentrated water solution of the substance, the classification is out of category.
Respiratory sensitization or Skin sensitization	:	Respiratory sensitization : Not possible to classify because of insufficient data. Skin sensitization : Not possible to classify because of insufficient data.
Mutagenicity	:	Not possible to classify because of insufficient data.
Carcinogenic effects	:	Not possible to classify because of insufficient data
Effects on the reproductive system	:	Not possible to classify because of insufficient data.
Specific target organ systemic toxicity single exposure	:	Not possible to classify because of insufficient data.
Specific target organ systemic toxicity repeated exposure		

: Not possible to classify because of insufficient data.

Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity

Fish toxicity : Acute aquatic toxicity : Not possible to classify because of insufficient data.

Chronic aquatic toxicity : Not possible to classify because of insufficient data.

Rediualbility and degradability

: Not available

Mobility : Not available

13. Disposal consideration

Residual disposal : Dilute with copious water and adjust the pH of the solution, after that flush in drains. Or entrust approved waste disposal companies with the disposal.

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class : Not applicable

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References

Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd.(1963)

Dangerous Properties of Industrial Materials,6th ed. N.I.Sax Van Nostrand Reinhold Company(1984)

Handbook of 15710 Chemical Products, The Chemical Daily Co.(2010)

The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.