

MSDS No.1240-E

MATERIAL SAFTY DATA SHEET

ISSUED DATE : Oct,1.,2004

NAME : Komatsuya Chemical Co, . LTD
ADDRESS : Hagiwara 890 Hidaka-cho Hidaka-gun
Wakayama 649-1202 Japan
PERSON IN CHARGE : Toyokazu Inaba
Quality Control Section
EMAGENCY TELEPHON NUMBER : 0738-63-2007

PRODUCT NAME

Disodium L- Tartrate (Japanese Industrial Standard)

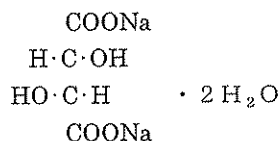
INFORMATION OF INGREDIENTS COMPOSITION

CLASSIFICATION OF MIXTURE OR NON=MIXTURE : Non-Mixture

CHEMICAL NAME : Disodium salt of (2R,3R)-2,3-Dihydroxybutanedioic acid, dihydrate

INGREDIENT AND ASSAY : Disodium of L- Tartrate (C₄H₄Na₂O₆ · 2H₂O :230.08) More than 98.5%.(After drying)

CHEMICAL FOMULA OR STRUCTURAL FORMULA : C₄H₄Na₂O₆ · 2H₂O



MOLECULAR WEIGHT : 230.08

CHEMICAL MATERIAL No. IN JAPAN : 2-1457

CAS No. : 868-18-8

HAZARD IDENTIFICATION

NAME OF CLASSIFICATION : Not corresponding to standard classification of Japanese Chemical Industrial Association.

HAZARDOUS DATA : Incombustible

HARMFUL DATA : Stimulate to touch on membrane of eye, nose and skin.

INFLUENCE TO ENVIRONMENT : Take care of BOD, COD in water solution at disposal.

FIRST AID MEASURES

EYE CONTACT : Flush through with flowing water.

After that if something is wrong, get medical attention.

SKIN CONTACT : Flush with flowing water

After that something is wrong, get medical attention.

INHALATION : No problem in normal work.

INGESION : No problem if taking a little bit.

In case of taking a large amount, give about 2~3 cups of water and induce vomiting. After that if something is wrong, get promote medical attention.

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FIRE-FIGHTING MEASURES

MEASURES : This product is combustible, therefore if there is a possibility of burning, transfer to a safety place immediately.

EXTINGUISH : Water, general extinguisher.

HANDLING AND STORAGE

HANDLING : This product is weakly alkali side, in case of removal, put on protect clothing, Goggles, rubber boot, rubber gloves and mask.

STORAGE : Avoid high temperature and high humidity, and seal up completely.

After opening, use quickly.

This product grow hard cake in high temperature and high humidity.

ACCIDENTAL RELEASE MEASURES

Gather up and in to bags, after that dispose as industrial wastes. Or dissolve in water to drains necessary treatment. At this time take care of pH, BOD, COD values of concentrated Disodium tartrate. For working, it is advisable to put on protective clothes.

EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROLLED DENSITY : Not applicable

ALLOWBLE DENNSITY : Not applicable

FACILITIES FOR MEASURE : Not necessary in particular

PROTECTIVE EQUIPMENTS :

RESPIRATORY : Its advisable to wear.

EYE-PROTECTING GOGGLES : Its advisable to wear.

GLOVES : Its advisable to wear.

CLOTHES : Its advisable to wear.

MATERIALS OF PLANT AND EQUIPMENT

Usually use SUS-316, Glass lining, Resin lining vessel.

PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION : Colorless crystal or white crystalline powder.

SMELL : No smell.

BOILING POINT : Nonexistent

VAPOR PRESSURE : Nonexistent

MELTING POINT : Nonexistent

SOFTENING POINT : Nonexistent

SPECIFIC ROTATION : $[\alpha]^{20} : +25.0 \sim +27.5^{\circ}$ (5g,H₂O,50mL,100mm)

SPECIFIC GRABITY : $d=1.82$

PH : 7~9 (5.0g / 100ml water)

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SOLUBILITY TO WATER : about 3 parts cold water , 1.5 parts boiling water

HAZARDOUS INFORMATION

FLASH POINT : No information in particular

IGNITION POINT : Nonexistent

EXPLOSIN LIMIT : Nonexistent

COMBUSTIBILITY : Incombustible

SPONTANEOUS COMBUTION : Nil

REACTIVITY : Well soluble water and ethanol.

OXAIZING ABILITY : Nil

SELF-REACTIVITY AND EXPLOSIVILITY : Nil

DUST EXPLOSIVILITY : Nil

STABILITY AND REACTIVITY : Stable in normal conditions

TOXICOLOGICAL INFORMATION

SKIN CORRODIBILITY : When touched long time concentrated solution, it may cause irritation and come into swelling.

IRRITABILITY (SKIN,EYES)

SKIN : be feel stimulus.

EYES : be feel stimulus.

ACUTE TOXICITY :

ORAL	(RAT)	LD ₅₀	1,290 mg / kg
	(MOSE)	LD ₅₀	4,370 mg / kg

SUBACUTE TOXICITY : The test animal used four dogs, and test term was 9~114 days
They was tested the diet contain 990mg/kg/day of tartaric acid.
Three dogs had normal value in consequence of biochemical inspection of blood.

CHRONIC TOXICITY : The test animal separated two groups, and each group consist of 24 male rats group and 24 female rats groups.
Each group tested the diet contain 0.1%,0.5%,0.8%,1.2% tartaric acid. Test term was 2 years.
Another group (48 male and female rats) had the diet not contain tartaric acid .
It could not found out the difference of between each group.

CARCINOGENICITY : No information in particular

MUTAGENICITY : No information in particular

GENERATIVE TOXICITY : No information in particular

DEFORMITY : No information in particular

OTHERS : value of ADI 0~30 mg / kg (F/W)

ECOLOGICAL INFORMATION

RESOLVILITY : Hydrolysable and decompose by activated sludge process.

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ACCUMULATIVITY : Nil

TOXICITY TO FISH : No information in particular

DISPOSAL INFORMATION

This product have high value of BOD&COD in water soluble liquid.

TRANSPORT INFORMATION

Refer to "HANDLING AND STORAGE"

Never use Hook

Not high load

No water

In case of transportation, load not let fall and break bags, and take care not to fall down the load.

REGULATION INFORMATION

Apply to The Japanese Industrial Standard 2001

Pollutant Release and Transfer Register : None of the chemicals are on the PRTR List

Poisonous and Deleterious Substances Control Law : None of the chemicals are on the List

Environmental hormone : None of the chemicals are on the List

Notifiable substances : None of the chemicals are on the List

OTHER INFORMATION

THE HANDBOOK OF CHEMISTRY EDITED BY JAPANESE CHEMICAL SOCIETY
GRAS REVIEW

THE MERCK INDEX (11TH EDITION)

THE JAPANESE STANDARDS FOR FOOD ADDITIVES SEVENTH EDITION 1999

THE JAPANESE PHARMACOPOEIA 14TH EDITION

THE 1ST EDITION ON MARCH 2,1999
