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SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

a. Product name : Rheopearl TT2

Product code : H100151

b. Information on manufacturer/supplier/distributor

Company name : Chiba Flour Milling Co., Ltd.

Address : 17 Shinminato, Mihama-ku, Chiba, Japan

Phone number : +81-43-241-0111 Emergency phone : +81-43-241-0111

number

E-mail address : kikaku@chiba-seifun.co.jp

c. Recommended use of the chemical and restrictions on use

: Pharmaceutical additive, raw material for quasi-pharmaceutical products,

cosmetics and other chemicals

SECTION 2: Hazards identification

a. GHS Classification (The guidance of GHS classification (Mar. 2015, Japan) for industries is used.)

: Not a hazardous substance.

b. Label elements : Not a hazardous substance.c. Other hazards : Designated flammable goods

(Fire and Disaster Management Act. Article 9 paragraph 4 in JAPAN)

SECTION 3: Composition/information on ingredients

Chemical substance

Chemical name or common name : Dextrin Palmitate/2-Ethylhexanoate

Chemical properties (Rational formula or chemical structure):

A: C15H31COor CH3(CH2)3CHCO-| CH2CH3

or H

n: Degree of Polymerization

CAS No. : 183387-52-2

Serial no. of government : (8)-126

gazette (A • B)

(A) The Law concerning Examination and Regulation of Manufacture, etc. of Chemical Substances

(B) Industrial Safety and Health Law

Impurities and stabilizing additives : None

contributed to classification

Content or content range : 95% or more

: Methanol < 5ppm (Detection Limit. Internal test.) Impurities contained less than

the lower concentration limit of Dimethylformamide < 5ppm (Detection Limit. Internal test.)

mixture as per GHS classification β-Picoline < 300ppm

2-ethylhexanoic acid < 0.1%

Impurities not contributed

to classification

: Palmitic acid 5% or less

SECTION 4: First aid measures

a. Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice

immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : No special precautions are necessary for first aid responders.

If inhaled : Immediately remove victim to fresh air.

If not breathing, if breathing is weak, loosen clothing and maintain a

open airway and then, give artificial respiration.

Get medical attention if symptoms occur

If case of skin contact : Wash with water and soap.

Get medical attention if symptoms occur.

If case of eye contact : If in eyes, rinse well with water.

Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.

> Get medical attention if symptoms occur Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Risks :Contact with dust can cause mechanical irritation or drying of the

Dust contact with the eyes can lead to mechanical irritation.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically and supportively. Treatment

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Water spray

> Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing media : High volume water jet.

Special hazards arising from the substance or mixture

Specific hazards during

: Do not use a solid water stream as it may scatter and spread

firefighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion products: Carbon oxides

Advice for firefighters

Special protective equipment

: Wear self-contained breathing apparatus for firefighting if

for firefighters necessary. Use personal protective equipment.

Specific extinguishing methods: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

SECTION 6: Accidental release measures

a. Personal precautions, protective equipment and emergency procedures

Personal precautions :Follow safe handling advice and personal protective

equipment recommendations.

b. Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

c. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable

container for disposal.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

d. Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

a. Precautions for safe handling

Technical measures :Static electricity may accumulate and ignite suspended dust

causing an explosion.

Provide adequate precautions, such as electrical grounding and

bonding, or inert atmospheres.

Local/Total ventilation

: Use only with adequate ventilation.

Advice on safe handling : Do not breathe dust.

Do not swallow.

Avoid contact with eyes.

Avoid prolonged or repeated contact with skin.

Handle in accordance with good industrial hygiene and safety

practice.

Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are located

close to the working place. When using do not eat, drink or smoke.

Wash contaminated clothing before re-use.

b. Storage:

Technical measures : Avoid fire, sources of heat.

Requirements for storage : Keep in properly labelled containers. Store in accordance with the

areas and containers particular national regulations.

Advice on common storage : Do not store with the following product types:

Strong oxidizing agents

Storage condition : Store in a cool and dark area, away from direct sunlight, high

temperature and high humidity.

Container and packaging material: Recommend to keep container unopened.

SECTION 8: Exposure controls/personal protection

a. Control parameters

Contains no substances with occupational exposure limit values.

b. Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

 $\label{lem:minimize} \mbox{Minimize workplace exposure concentrations}.$

Apply measures to prevent dust explosions.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment:

Eye protection : Wear the following personal protective equipment:

Safety goggles

Hand protection

Material : Rubber gloves

Remarks : Choose gloves to protect hands against chemicals depending on

the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Wash hands before breaks and at the end of workday.

Breakthrough time is not determined for the product. Change

gloves often!

Skin and body protection : Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that

exposures are within recommended exposure guidelines.

Filter type : Particulates type (P)

SECTION 9: Physical and chemical properties

a. Information on basic physical and chemical properties

Appearance : powder

Colour : white, light yellow
Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : 50 - 130 °C

Initial boiling point and boiling : No data available

range

Flash point : >200 °C

Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : Not applicable
Relative vapour density : Not applicable

Solubility(ies)

Density

Water solubility : insoluble Solubility in other solvents : soluble

Solvent: Xylene

: 0.45 - 0.60 g/cm3

soluble

Solvent: Chloroform

soluble

Solvent: Benzene

insoluble

Solvent: Ethanol

insoluble

Solvent: Methanol

soluble

Solvent: carbon tetrachloride

Partition coefficient : No data available

n-octanol/water

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : Not applicable Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

b. Other information

Burning calories : 34.8 kJ/g

SECTION 10: Stability and reactivity

a. Reactivity

Not classified as a reactivity hazard.

b. Chemical stability

Stable under normal conditions.

c. Possibility of hazardous reactions

Hazardous reactions : Dust can form an explosive mixture in air.

Can react with strong oxidizing agents.

d. Conditions to avoid

Conditions to avoid : None known.

e. Incompatible materials

Materials to avoid : Oxidizing agents

f. Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

a. Information on toxicological effects

Information on likely routes of:

exposure Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

a. Hazards to aquatic environment- acute hazard: No data.

b. Hazards to aquatic environment- chronic hazard: No data.

SECTION 13: Disposal considerations

a. Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes are not

product specific, but application specific.

Waste codes should be assigned by the user, preferably in discussion

with the waste disposal authorities.

Contaminated

: Empty containers should be taken to an approved waste handling site for

packaging recycling or disposal.

If not otherwise specified: Dispose of as unused product.

SECTION 14: Transport information

a. UN number

Not regulated as a dangerous good

b. UN proper shipping name

Not regulated as a dangerous good

c. Transport hazard class(es)

Not regulated as a dangerous good:

d. Packing group

Not regulated as a dangerous good

e. Environmental hazards

Not regulated as a dangerous good

f. Special precautions for user

Not applicable

g. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks: Not applicable for product as supplied.

SECTION 15: Regulatory information

Fire and Disaster Management Act. Article 9 paragraph 4 in JAPAN:

Designated combustible material (Combustible solids: 3,000 kg)

SECTION 16: Other information

Reference: None.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.