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Material Safety Data Sheet

1. Identification

Product identifier used on the label

COMPERF Yellow 1111K/1112K/1113K/2111K/2112K/2113K/3111K/3112K/3113K

Recommended use of the chemical and restriction on use

Recommended use*: colorant(s)

Suitable for industrial use only: coatings, plastics processing industry

* The "Recommended use" identified for this product is not part of the seller's published specification. The terms of this Material Safety Data Sheet (MSDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

FINELAND CHEM CO., LIMITED

Xianggong village, Hezhuang town, Xiaoshan District, Hangzhou, China

Telephone: +86 571 83531793 E-mail: hfchemical@yahoo.com

Emergency telephone number

International emergency number: Telephone: +86 571 83531793

Other means of identification

Molecular formula: (Ti,Sb,Ni)O₂

Chemical family: Complex Inorganic Color Pigment Synonyms: C.I. Pigment Yellow 53, C.I. 77788

2. Hazards Identification

According to Regulation (EC) No 1272/2008 [CLP]

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

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Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

Emergency overview

NOTICE:

May cause mechanical irritation to eyes, skin and respiratory system.

AVOID CREATING DUST.

Avoid inhalation of dusts.

Use with local exhaust ventilation.

Wear a NIOSH-certified (or equivalent) particulate respirator.

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

3. Composition / Information on Ingredients

Substances

CAS Number 8007-18-9 EINECS Number 232-353-3 Content (W/W) Chemical name Nickel Antimony Titanium Yellow rutile

The complex inorganic color pigment in this product is made by high temperature fusion. Due to resulting unique structure, the fired pigment will not necessarily exhibit the same properties as the component oxides or metals in their pure state.

Mixtures

Not applicable

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Seek medical attention if necessary.

Most important symptoms and effects, both acute and delayed

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Symptoms: No significant reaction of the human body to the product known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital

functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

Water, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

N/A

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

No particular hazards known.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

The degree of risk is governed by the burning substance and the fire conditions.

Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Avoid dust formation. Use personal protective clothing.

Ensure adequate ventilation.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

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Protection against fire and explosion: No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Nickel antimony titanium yellow rutile: TWA value 0.5 mg/m3 (ACGIH/TLV)

CAS No. 8007-18-9

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Observe OSHA regulations for respirator use

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Due to the coloring properties of the product closed work clothes should be used, to avoid stains during manipulation. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form: Powder Odor: Odorless

Odor threshold: Not applicable, odor not perceivable

Color: Yellow
pH value: 6 - 9
Melting point: >1,000 °C
Boiling point: Not applicable

Flash point: Study does not need to be conducted.

Flammability: not flammable

Lower explosion limit: For solids not relevant for classification and labelling Upper explosion limit: For solids not relevant for classification and labelling

Autoignition: Not applicable Vapor pressure: Not applicable

Density: 4.5 g/cm₃ (20 °C) (DIN EN ISO 787-10)

Relative density: 4.5 (20 °C)

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Bulk density: Approx. 700 kg/m₃

Vapor density: The product is a non-volatile solid.

Partitioning coefficient n-

octanol/water (log Kow): Not applicable. Self-ignition temperature: Not self-igniting

Thermal decomposition: No decomposition if correctly stored and handled.

Viscosity, dynamic: Study does not need to be conducted. Viscosity, kinematic: Study does not need to be conducted.

Solubility in water: Insoluble

Evaporation rate: The product is a non-volatile solid.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

Conditions to avoid

Avoid dust formation. Avoid deposition of dust. See MSDS section 7 - Handling and storage.

Incompatible materials

No substances known that should be avoided.

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if correctly stored and handled.

11. Toxicological information

Acute Toxicity/Effects

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Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion.

Oral

Type of value: LD50

Species: rat

Value: > 10,000 mg/kg (OECD Guideline 401)

Inhalation

Study scientifically not justified.

Dermal

Study scientifically not justified.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit Result: non-irritant Method: Draize test

The product has not been tested. The statement has been derived from

substances/products of a similar structure or composition.

Eye

Species: rabbit Result: non-irritant Method: Draize test

The product has not been tested. The statement has been derived from

substances/products of a similar structure or composition.

Sensitization

Assessment of sensitization: Study scientifically not justified.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects. The substance is inert. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

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Assessment of carcinogenicity: Study not necessary due to exposure considerations. The substance is inert.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The substance is inert. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The substance is inert. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information

The product is insoluble in acids or alkalies.

Symptoms of Exposure

No significant reaction of the human body to the product known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) > 10,000 mg/l, Leuciscus idus

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants

EC50 (72 h) > 100 mg/l, Scenedesmus subspicatus

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

Study scientifically not justified.

Assessment of terrestrial toxicity

Study scientifically not justified.

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Microorganisms/Effect on activated sludge

Toxicity to microorganisms

Bacterium/EC10(30H): > 10,000 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Persistence and degradability

Elimination information

Study technically not feasible.

Bioaccumulative potential

Assessment bioaccumulation potential

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

The product contains heavy metals, which are firmly built in a matrix and are therefore not bioavailable. The local waste-water limit values are to be considered for the mentioned heavy metals. Discharge into the environment must be avoided.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Check for possible recycling.

Container disposal:

Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport Not classified as a dangerous good under transport regulations USDOT

Sea transport Not classified as a dangerous good under transport regulations IMDG

Air transport Not classified as a dangerous good under transport regulations

IATA/ICAO

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15. Regulatory Information Inventory status

IECSC (China) Listed

KECL(Korea) Listed

ENCS(Japan) Listed

PICCS(Philippines) Listed

EINECS(EU) Listed

TSCA(USA) Listed

Labeling according to EEC Directives Not Regulated

16. Other Information

MSDS Prepared by:

MSDS No.: PY53000000-MSDS/EN MSDS Prepared on: 2021/01/15

The data contained in this Material safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This Material safety data sheet is neither a Certificate of Analysis (COA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this Material safety data sheet do neither represent an agreement on the corresponding contractual quality of the substances/mixtures nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

END OF MATERIAL SAFETY DATA SHEET