Safety Data Sheet
According to regulation (EC) No. 1907/2006 (REACH)

23178 Orange DPP RA, PO 73

Identification of the Substance/Mixture and of the Company/Undertaking

1. Product Identifier

Product Name: Orange DPP RA, PO 73
Article No.: 23178
UFI: --

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Coloring component

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG
Address: Hauptstr. 41-47, 88317 Aichstetten, Germany
Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606
Internet: www.kremer-pigmente.com
EMail: info@kremer-pigmente.com
Importer: --

Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4. Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)
This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)
No classification required according to the CLP/GHS guidelines.

Hazard designation: Not applicable.

Signal word:

Hazard designation: EUH208 May produce an allergic reaction.

Safety designation:

Hazardous components for labelling:

EUH208: Contains Zirconium(IV) hydrogenphospate. Can cause
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3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Diketo-pyrrolo-pyrrol. Pigment Orange 73, C.I. 561170

Information on Components / Hazardous Ingredients:

Zirconium(VI) hydrogenphosphate (Skin Sens. 1, H317); REACH Reg. No. 01-2120114357-62 10 - 20 % CAS-Nr: 13772-29-7
EINECS-Nr: 237-401-7
EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Remove contaminated clothes.

After inhalation:

Supply fresh air and seek medical advice in case of complaints.

After skin contact:

Remove contaminated clothing. Wash off immediately with plenty of water and soap.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes. Remove contact lens.

After ingestion:

Rinse mouth with water and drink plenty of water. Do not induce vomiting.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Symptomatic treatment (decontamination, vital functions), no specific antidote known.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:
Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Product may cause an explosive mixture of organic dust and air.
In case of fire: formation of carbon monoxide, carbon dioxide, nitrogen oxide, phosphorus oxide and metall oxides / oxides.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Cool exposed containers with water spray.
Contaminated extinguishing water and debris should be disposed of according to local regulations.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust, wear protective clothing.

6.2. Environmental Precautions

Environmental precautions:

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal. Avoid formation of dust and static discharges. Prevent from getting into sewage system. Wear protective gear and self-contained breathing apparatus.

6.4. Reference to other Sections

Protective clothing, see Section 8.
See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.
Wear adequate protective clothing (see para. 8).

Hygienic measures:

Wash hands at the end of work. Preventive skin protection recommended.
Do not eat or drink during work. Do not smoke.
Remove contaminated clothing before entering dining areas.

7.2. Conditions for Safe Storage, including any Incompatibilities
### Storage conditions:
Store in tightly sealed containers in a dry and cool room. Protect against heat and direct sunlight.

### Requirements for storage areas and containers:
Close open containers with care and store in an upright position to avoid spilling.

### Information on fire and explosion protection:
Risk of dust explosion. Keep away from sources of ignition - do not smoke. Take measures to prevent electrostatic discharge. Dust explosion class 1 (Kst-value > 0 - 200 bar m/s).

### Storage class:
11; Combustible solids (TRGS 510)

### Further Information:
Storage temperature: 5 - 35°C

### 7.3. Specific End Use(s)
No further information available.

### 8. Exposure Controls / Personal Protection

#### 8.1. Parameters to be Controlled

**Parameters to be controlled (DE):**
- **Zirconiumbis (hydrogen phosphate)** (CAS 13772-29-7), TLV (TRGS 900): 1 mg/m3 (inhalable fraction); 1 (I). Measured as Zirconium (Zr)
- Peak limit category 1

**Category I:** Substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.

**Parameters to be controlled:**

**Derived No-Effect Level (DNEL):**
No values available.

**Predicted No-Effect Concentration (PNEC):**
No values available.

### Additional Information:

#### 8.2. Exposure Controls

**Technical protective measures:**
Provide adequate ventilation in case of dust formation.

**Personal Protection**
**General protective measures:**
Keep away from foodstuffs and drinks. Do not eat, drink or smoke.
Respiratory protection: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, type P2 or FFP2).

Hand protection: Protective gloves (EN 374)

Protective glove material: Recommended: Protective index 6, corresponding > 480 min. of permeation time according to EN 374.
Nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm).

Eye protection: Safety glasses with protective shields (EN 166).

Body protection: Protective clothing.

Environmental precautions: Prevent contamination of open water ways and sewage system.
Avoid contamination of ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder
Color: orange
Odor: odorless

Odor threshold: no information available
pH-Value: ca. 7.5

Melting temperature: 400°C
Boiling temperature: not applicable

Flash point: not applicable
Evaporation rate: not applicable

Flammability (solid, gas): not highly flammable
Upper explosion limit: no information available
Lower explosion limit: no information available
Vapor pressure: 0 kPa (0 mm Hg)
Vapor density: No information available.
Density: 1.3 g/cm³
Solubility in water: insoluble (20°C)
Coefficient of variation (n-Octanol/Water): 5 logKOW
Auto-ignition temperature: 500°C (932°F)
Decomposition temperature: not determined
Viscosity, dynamic: not applicable
Explosive properties: Product does not present an explosion hazard.
Oxidizing properties: not oxidizing
Bulk density: 290 kg/m³

9.2. Further Information
Solubility in solvents:
Viscosity, kinematic:
Burning class:
Solvent content:
Solid content:
Particle size:
Other information: No further information.

10. Stability and Reactivity
10.1. Reactivity
Stable if used according to specifications.

10.2. Chemical Stability
Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions
The product is not dust explosive when delivered. The accumulation of fine dust can however increase the risk of dust explosion.

10.4. Conditions to Avoid
Conditions to avoid: Avoid electrostatic discharge.

Thermal decomposition:
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10.5. Incompatible Materials

Strong acids, strong bases and strong oxidizing agents.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral: > 2000 mg/kg (rat; OECD 401)
LD50, dermal: > 2000 mg/kg (rat; OECD 402)
LC50, inhalation: No information available.

Primary effects

Irritant effect on skin: Non irritating (rabbit; OECD 404)
Irritant effect on eyes: Non-irritating to eyes (rabbit; OECD 405)
Inhalation: No information available.
Ingestion: No information available
Sensitization: No sensitizing effects known (guinea pig; OECD 406).
Mutagenicity: No genotoxic potential.
Reproductive toxicity: No relevant data found.
Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Teratogenicity: No information available.
Additional toxicological information: Aspiration hazard: not applicable

12. Ecological Information

12.1. Aquatic Toxicity

Not hazardous for aqueous organisms. No toxic effects.
Fish toxicity:  
LC50: > 40 mg/l (96h, Oncorhynchus mykiss; OECD 203)

Daphnia toxicity:  
EC50: > 40 mg/l (48h, Daphnia magna; OECD 202)

Bacteria toxicity:  
No negative effects.

Algae toxicity:  
EC50: > 40 mg/l (72h, Desmodesmus subspicatus; OECD 201)

12.2. Persistency and Degradability  
The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants. 
Elimination information: not biodegradable (28d; OECD 301B; ISO 9439; 92/69/EEC, C.4-C)

12.3. Bioaccumulation  
No information available.

12.4. Mobility  
No information available.

12.5. Results of PBT- und vPvP Assessment  
According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): this product is neither a PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative/very toxic) substance nor does it contain a PBT or vPvB substance.

12.6. Other Adverse Effects  
Water hazard class:  
1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:  
No impairment of the biodegradability of active sludge expected when small amounts are discharged in biological sewage plants.

Further ecological effects:  
The product is not soluble in water. No negative effects expected.

AOX Value:  
Product does not contain any organically bound halogens which influence the AOX value of discard water.

13. Disposal Considerations  
13.1. Waste Treatment Methods  
Product:  
Disposal should be avoided or minimized.  
If product cannot be reused or recycled, it has to be disposed of according to current local regulations.  
Do not allow product to leak into the sewage system, waters or soil. This material and its container must be disposed of in a safe way.

European Waste Code (EWC):
Uncleaned packaging: Contaminated packaging must be disposed like the substance. Non-contaminated packaging may be recycled.

### Transport Information

#### 14. UN Number

**ADR, IMDG, IATA**

#### 14.2. UN Proper Shipping Name

**ADR/RID:**

No hazardous goods according to ADR / DOT (US) (land transportation).

**IMDG/IATA:**

Not hazardous goods

#### 14.3. Transport Hazard Classes

**ADR Class:**

*not applicable*

**Hazard no.:**

**Classification code:**

**Tunnel restriction code:**

**IMDG Class (sea):**

*not applicable*

**Hazard no.:**

**EmS No.:**

**IATA Class:**

*not applicable*

**Hazard no.:**

#### 14.4. Packaging Group

**ADR/RID:**

*not applicable*

**IMDG:**

**IATA:**

#### 14.5. Environmental Hazards

None

#### 14.6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

#### 14.7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

*not applicable*

#### 14.8. Further Information

#### Regulatory Information
15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15.3. Further Information

Listed in the following inventories:

REACH (EU), TSCA (US), DSL (CA), AICS (AUS), ENCS (JP), KECI (KR), PICCS (PH), IECSC (CN), NZIoC (NZ), TCSI (TW)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.