

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermilion

Page 1

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

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

1.1. Product Identifier

Product Name: Cadmium Orange No. 2, vermilion

Article No.: 21110

UFI: --

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

Identified uses:

*To dye plastics, varnishes and cement.
Production of ceramic coating suited for firing and decor
preparation for glass and ceramic.*

Uses advised against:

Not for cosmetics, medicine, tattoo inks

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

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

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

1.4.2 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)*

*This product does not require classification and labelling as
hazardous according to CLP/GHS.*

Hazard designation:

Signal word:

Hazard designation:

Safety designation:

P102

Keep out of reach of children.

P270

Do not eat, drink or smoke when using this product.

next page: 2

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 2

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

Hazardous components for labelling:

2.3. Other Hazards

No information available.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Inorganic salt
Cadmium sulfoselenide red

Information on Components / Hazardous Ingredients:

Cadmium sulfoselenide red, Pigment Red 108, C.I. 77208/77196	50 - 100 %	CAS-Nr: 58339-34-7 EINECS-Nr: 261-218-1 EC-Nr:
-----------------------------------------------------------------	------------	------------------------------------------------------

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Do not leave affected persons unattended.

After inhalation:

In case of unconsciousness place patient stable in side position for transportation.

Get medical help.

Consult physician if symptoms persist.

After skin contact:

Wash with soap and rinse with plenty of water.

Remove contaminated clothing.

After eye contact:

Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.

Remove contact lens.

Protect unharmed eye.

After ingestion:

Rinse mouth thoroughly with plenty of water and drink plenty of water. Consult a physician.

Never give anything by mouth to an unconscious person.

Do not give milk or alcohol to drink.

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

Symptoms:

No further information available.

Effects:

No further information available.

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

Treatment:

next page: 3

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermilion

Page 3

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

First-aid measures must be specified together with the responsible physician for industrial medicine.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Do not let extinguishing water enter the sewerage system or water courses.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

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:

Wear appropriate protective equipment. Keep spectators away.

Avoid formation of dust.

Ensure adequate ventilation.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

Contact local authorities if product pollutes soil or vegetation.

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.

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).

next page: 4

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 4

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

Hygienic measures:

Do not eat or drink during work. Do not smoke.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry and well ventilated location.

Do not store together with strong acids and oxidants.

Requirements for storage areas and containers:

Electrical installation/working materials must comply with the technological safety standards.

Information on fire and explosion protection:

Avoid dust formation.

Provide adequate exhaust ventilation at places where dust is formed.

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

Store in a dry place.

No decomposition if used and stored according to specifications.

7.3. Specific End Use(s)

Further information:

The technical guidelines for the application of this product/mixture should be followed.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Does not contain substances with occupational exposure limits.

Parameters to be controlled (DE):

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Technical protective measures have priority to personal protective measures.

Personal Protection

General protective measures:

Wear adequate protective clothing.

Wash hands and face at the end of work. Carry out work under a fume hood. Do inhale product.

next page: 5

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 5

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

Respiratory protection:

None required under normal operating conditions.

Hand protection:

*In case of prolonged contact:
Recommended*

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>bright red</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>7 (5 % suspension)</i>
<i>Melting temperature:</i>	<i>not available</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not determined</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>3.5 - 5.0 g/cm³</i>

next page: 6

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermilion

Page 6

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not applicable</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>> 300°C</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	<i>not available</i>
<i>Oxidizing properties:</i>	<i>no information available</i>
<i>Bulk density:</i>	<i>not determined</i>

9.2. Further Information

<i>Solubility in solvents:</i>	
<i>Viscosity, kinematic:</i>	
<i>Burning class:</i>	
<i>Solvent content:</i>	
<i>Solid content:</i>	
<i>Particle size:</i>	<i>No data available.</i>

Other information:

10. Stability and Reactivity

10.1. Reactivity	<i>Stable if used according to specifications.</i>
10.2. Chemical Stability	<i>No decomposition if used according to specifications.</i>
10.3. Possibility of Hazardous Reactions	<i>Reacts with acids: development of hydrogen sulfide. Reacts with strong oxidants.</i>
10.4. Conditions to Avoid	
<i>Conditions to avoid:</i>	<i>No information available.</i>
<i>Thermal decomposition:</i>	<i>No data available.</i>
10.5. Incompatible Materials	<i>Strong acids and strong oxidizing agents.</i>

next page: 7

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermilion

Page 7

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

10.6. Hazardous Decomposition Products

None if handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral: > 5000 mg/kg

LD50, dermal:
No information available.

LC50, inhalation:
No information available.

Primary effects

Irritant effect on skin:
Non irritating

Irritant effect on eyes:
Non-irritating to eyes

Inhalation:

Ingestion:

Sensitization:
No relevant data found.

Mutagenicity:
No relevant data found.

Reproductive toxicity:
No relevant data found.

Carcinogenicity:
No relevant data found.

Teratogenicity:
No information available.

Specific target organ toxicity (STOT):
No relevant data found.

Aspiration hazard
No information available.

11.2. Information on other Hazards

No further information available.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:
No negative effects.

Daphnia toxicity:
No negative effects.

next page: 8

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 8

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

Bacteria toxicity:

No negative effects.

Algae toxicity:

No negative effects.

12. 2. Persistency and Degradability

Inorganic substance. Biological degradability is not affected.

12. 3. Bioaccumulation

No bioaccumulation expected.

12. 4. Mobility

No information available.

12. 5. Results of PBT- und vPvP Assessment

This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.

12. 6. Endocrine Disrupting Properties

No data available.

12. 7. Other Adverse Effects

Water hazard class:

1, slightly hazardous (German Regulation; Self-assessment).

Behaviour in sewage systems:

Further ecological effects:

No ecological data available.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

Waste Code No.:

14. Transport Information

14. 1. 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

next page: 9

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 9

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

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. Maritime Transport in Bulk according to IMO Instruments

not applicable

14.8. Further Information

15. Regulatory Information

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

Water hazard class:

1, slightly hazardous for water (German Regulation)

Local regulations on chemical accidents:

EC-Regulation 96/82 does not apply (2003).

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, Registered no. 23 (Cadmium oxide)
The use of cadmium in pigments in certain polymers, as well as in aqueous- and non-aqueous based paints is restricted.*

Technical instructions on air quality:

next page: 10

Safety Data Sheet

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



21110 Cadmium Orange No. 2, vermillion

Page 10

Revised edition: 08.09.2020

Version: 2

Printed: 15.03.2023

15.2. Chemical Safety Assessment

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)

15.3. Further Information

This product is not a ozone-depleting substance (EC Reg. 2037/2000) and not a persistent organic pollutant (POP) (EC Reg. 850/2004).

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.