

**42100 Carmine Naccarat**

Edition: 21.10.2001

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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

Product Information:

Product Name: Carmine Naccarat  
Article No.: 42100  
Application: Artists' and Restauration Material

Company: Kremer Pigmente GmbH & Co. KG  
Hauptstrasse 41-47, D - 88317 Aichstetten  
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**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Composition:

Aluminium lake of carminic acid; C<sub>22</sub>H<sub>2</sub>OO<sub>13</sub>.

CAS No.: 1390-65-4  
Color index no.: 75470  
EINECS No.: 215-724-4

Description:

Red lake powder, obtained from the aqueous extract of the Coccus Cacti which under certain conditions forms a complex with aluminium and calcium salts, known as natural Carmine.

**3. HAZARD IDENTIFICATION**

Health hazards: Inhalation of carmine naccarate dust may cause sensitization and may cause allergic reactions in sensitized persons.  
Environmental hazards: none reported  
Physical and chemical hazards: none reported

**4. FIRST AID MEASURES**

Symptoms of exposure: Staining is possible.  
After inhalation: Take person out of contaminated area and provide fresh air. If respiratory problems occur, contact your medical advisor immediately.  
After skin contact: Remove contaminated clothing immediately. Wash affected area thoroughly with water and mild detergent (soap). Color may stain the skin but is not dangerous.  
After eye contact: Flush eyes with copious amounts of water and seek medical attention if irritation persists.

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**5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media: Use appropriate extinguishing media for surrounding fire.  
Special fire-fighting procedures: Wear protective clothing, self-contained breathing apparatus.  
Unusual fire and explosion hazard: Organic powders may present a fire or explosion hazard.

**6. ACCIDENTAL RELEASE MEASURES**

Methods of cleaning/absorption: Small spillage: Dampen material to prevent dust. Flush the spillage area with water and mild detergent. Avoid splashing.  
Large spillage: Sweep-up spilled material and transfer to suitable disposal container. Flush remaining material with water and mild detergent, avoid splashing. Dispose according to local regulations.

**7. HANDLING AND STORAGE**

*Handling:*

Advice on safe handling: No special measures required.

*Storage:*

Requirements for storage areas and containers: Store in a cool and dry location (5-15°C), protected from exposure to air, heat and light. Keep material dry, and container tightly sealed after use. Use rubber gloves.

Recommended shelf-life: 6-12 months

Precautions after use: Use rubber gloves. Keep material dry, and container tightly sealed after use.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Ingredients with limiting values to be controlled: -

Personal protective equipment:

Hygiene measures: Follow the usual good standards of occupational hygiene. Do not eat, drink or smoke while working.

Respiratory protection: Appropriate local ventilation required. Approved dust masks.

Hand protection: Protective rubber gloves.

Eye protection: Safety glasses recommended.

Skin and body protection: Avoid contact with skin and remove contaminated clothing promptly.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form:	powder
Color:	red
Bulk density:	0.25 (20°C)
Solubility:	Soluble in diluted ammonia or other alkalis
Vapor pressure:	not applicable
Boiling range:	not available
Freezing range:	not available
Flash point:	not available

**10. STABILITY AND REACTIVITY**

Stability:	Very stable inert powder.
Conditions to avoid:	Humidity during storage.
Materials to avoid:	Contact with acids.
Hazardous decomposition products:	None expected.

**11. TOXICOLOGICAL INFORMATION**

LD50:	500 mg/kg BW in the diet (JECFA) (level causing no toxicological effect in rat)
ADI:	0 - 5 mg/kg BW/day (estimate of acceptable daily intake for man). The ADI included ammonium carmine or the equivalent of calcium, potassium or sodium salts.

**Skin irritation, sensitivity potential, skin toxicity:**

In man, carmine is rarely a skin sensitiser. Three subjects with skin lesions gave positive patch tests when tested with red lip salve containing calcium carmine, but negative reactions to colorless lip salve. In the only one of these subjects who was patch tested with carmine (in liquid paraffin), a reaction was seen at 0.01% but not at 0.05% (Sarkany\_et al., 1961).

**Short term toxicity (mouth):**

The results of a short-term study in rats fed ammonium carmine for up to 90 days at doses to 10 g/kg failed to show toxic effects (JECFA).

**Mutagenicity:**

A combined multigeneration / teratology / carcinogenicity study performed in rats reported no carcinogenic or adverse effects attributable to carmine in any of the three phases of the study (Ref. BIBRA unpublished report No. 230/1/79. SUP 11508-11512 and BIBRA unpublished report No. 230/1/81. SUP 11513-11518).

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Photooxidation toxicity:

Carmine is very stable to oxidation and is heat stable to in excess of 200°C. There are no reported incidences of photooxidative toxicity.

**12. ECOLOGICAL INFORMATION**

Cochineal insects are fully degraded, and carminic acid is biodegradable. No data is available for carmines but they do not present an environmental hazard.

**13. DISPOSAL CONSIDERATIONS**

Product: Dispose of in an approved disposal site or incineration plant in accordance to local regulations.

Empty containers: Dispose in the same manner as product.

**14. TRANSPORT INFORMATION**

ADR (Road) Code: not classified

AMDG (Sea) Code: not classified

IATA (Air) Code: not classified

**15. REGULATORY INFORMATION**

Labelling in accordance to EEC-Directive „The Classification, Packaging and labelling of Dangerous Substances“: not required

Carmine conforms to the EC Directive 94/45/EC as E-120 and conforms to the purity criteria for E-120 (Carmine).

**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 therefore not be construed as guaranteeing specific properties.

Even though the resistance to light of this historically known pigment is not very good, carmine is an indispensable red pigment for illumination.

Carmine can be used in water, oil and acrylic paints. It is also used in cosmetics causing allergies in about 1% of its users.

Carmine is also used as additive in pet food which has an addictive effect.