

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

Product Identifier

Product Name: Violin Varnish - recipe of 1710
Article No.: 79760
Use of the Substance/Preparation: Artists' and Restoration Material

Details of the Supplier of the Safety Data Sheet

Company: Kremer Pigmente GmbH & Co. KG
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2. Hazard Identification

Classification according to EC Regulation No. 67/548 or No.1999/45

Hazard designation:  F Flammable

Risk Phrases: R11 Highly flammable.
Safety Phrases: S07 Keep container tightly closed.
S33 Take precautionary measures against static discharges.
S09 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.

3. Composition/Information on Ingredients

Chemical Characterization: Violin varnish: with shellac, sandarac and amber.
Hazardous Ingredients: Ethanol (F; R11; H225) 50-65 %
CAS-Nr: 64-17-5 EINECS-Nr: 200-578-6 EC-Nr: 603-002-00-5

4. First Aid Measures

Description of the First Aid Measures

After inhalation: Supply fresh air. If required give artificial respiration. Keep patient warm.
Give artificial respiration in case breathing is not regular or if it has stopped.
In case of unconsciousness place patient stable in side position for transportation.
If breathing is difficult call a physician.

After skin contact: Remove contaminated clothing. Wash off immediately with plenty of water and soap.
If irritation continues consult a physician.

After eye contact: Rinse open eyes with plenty of water for at least 15 minutes. Consult physician.

After ingestion: Rinse mouth with water and drink plenty of water.
Do NOT induce vomiting. Consult physician immediately.

5. Fire-Fighting Measures

Extinguishing Media

- Suitable extinguishing media: CO₂, extinguishing powder, water jet.
Fight larger fire with water jet or alcohol resistant foam.
- Unsuitable extinguishing media: Never apply a strong water jet.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

- Personal precautions: Wear appropriate protective equipment. Keep spectators away.
Provide adequate ventilation. Keep away from sources of ignition.
Avoid contact with skin and eyes. Do not ingest or inhale.
- Environmental precautions: Do not discharge into drains, surface or ground water in concentrated form.
Contact local authorities if product pollutes soil or vegetation.
- Methods and material for containment and cleaning up: Contain with absorbent material (sand, diatomaceous earth, universal absorbent, Oil Dri) and dispose accordingly.

7. Handling and Storage

Precautions for Safe Handling

- Instructions on safe handling: Keep containers tightly closed.
Provide adequate ventilation, also in floor area (vapors are heavier than air).
- Information on fire and explosion protection: Keep away from sources of ignition - do not smoke. Take measures to prevent electricity static discharge.
Combustible liquid.
Vapors in combination with air can form an explosive compound.
Cool exposed containers with water.
Use only in explosion protective area. Extinguish any naked flames.
No not smoke. Remove ignition sources. Avoid sparks. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Conditions for Safe Storage, including any Incompatibilities

- Storage conditions: Keep container tightly closed. Protect against heat and direct sunlight. Store cool and dry. Heat can lead to a pressure increase and risk of bursting.
Store product in a well ventilated area.
Floor must be solvent resistant and leakproof.
- Storage class (VCI): 3: Flammable liquids
- Storage safety regulation (BetrSichV): Highly flammable.

8. Exposure Controls/Personal Protection

- Technical protective measures: Adequate ventilation to control airborne concentrations below the exposure limits.
- Parameters to be controlled (DE): Ethanol (CAS 64-17-5)

79760 - Violin Varnish - recipe of 1710

Revised edition: 06.06.2011

Parameters to be controlled (DE):	TLV: 960 mg/m ³ , 500 ml/m ³ ; 2(II); DFG, Y Methylethyl ketone (MEK; CAS 78-93-3)
Value:	AGW: 600 mg/m ³ , 200 ml/m ³ ; 1(I); DFG, H,Y
Parameters to be controlled (EC):	Methylethyl ketone (MEK; 78-93-3)
Value:	IOELV (EU): Short term value: 900 mg/m ³ , 300 ml/m ³ ; Long term value: 600 mg/m ³ , 200 ml/m ³

Personal Protective Equipment

General protective measures:	Remove contaminated clothing immediately. Avoid contact with skin and avoid inhalation of vapour. Do not eat, drink or smoke while working.
Respiratory protection:	Required in case of insufficient ventilation. Shortterm: gas filter A2.
Hand protection:	Solvent resistant protective gloves. Protective gloves The manufacturer's directions for use should be observed because of the great diversity of types.
Protective glove material:	Butyl rubber (480 min; 0.5 mm). Fluoro carbon rubber -FKM (480 min; 0.4 mm). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.
Eye protection:	Tightly fitting safety goggles.
Body protection:	Protective clothing, chemical resistant.

9. Physical and Chemical Properties*Information on Basic Physical and Chemical Properties*

Form:	liquid
Color:	clear, yellowish
Odor:	alcohol-like
Melting temperature:	-121°C
Boiling temperature:	78.3°C
Flash point:	12°C (DIN 51755 T1)
Ignition temperature:	425°C
Explosion risk:	Product is not explosive; however, an explosive vapor/air mixture can be formed.
Lower explosion limit:	3.5 Vol%
Upper explosion limit:	15 Vol%
Vapor pressure:	59 hPa (20°C)
Density:	0.789 g/cm ³ (20°C)
Solubility in water:	miscible
Viscosity dynamic:	1.2 mPas
Coefficient of variation (n-Octanol/Water):	-0.31 log POW

Other Information

The data is based on those of ethyl alcohol.

10. Stability and Reactivity

Reactivity:	No decomposition if used according to specifications.
Chemical stability:	Stable if used according to specifications.
Hazardous reactions:	Formation of explosive vapor-air-mixtures possible.
Conditions to avoid:	Avoid contact with heat, sparks and open fire.
Incompatible materials:	Oxidizing agents.
Hazardous decomposition products:	In case of fire: formation of carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on Toxicological Effects

Ethyl alcohol (64-17-5):

Acute Toxicity

LD50, oral:	6200 mg/kg (rat)
LD50, inhalation:	124.7 mg/l (4h, rat)
Irritant effect on eyes:	Irritating
Sensitization:	No sensitizing effect (guinea pig).
Reproductive toxicity:	No information available.
Cancerogenicity:	No data available.
Mutagenicity:	No data available.
Specific target organ toxicity (STOT):	No data available.
Further toxicological effects:	The main component is ethyl alcohol. Depending on the absorbed concentrations different states of intoxication is reached after an euphoric stage. Further symptoms are loss of self-control, dizziness, vomiting.

12. Ecological Information

Persistency and Degradability:	Ethanol: readily biodegradable (84 %, 20d).
Bioaccumulation:	No bioaccumulation expected.
Mobility:	No information available.
<i>Ecological effects</i>	
Aquatic toxicity:	:
- Fish toxicity:	Ethanol: LC50: > 8150 mg/l (48h, <i>Leuciscus idus</i>)
- Daphnia toxicity:	Ethanol: EC50: 9268-14221 mg/l (48h, <i>Daphnia magna</i>)
- Bacteria toxicity:	Ethanol: EC0: 6500 mg/l (16h; <i>Pseudomonas putida</i>)
- Algae toxicity:	Ethanol: EC0: 5000 mg/l (7d; <i>Scenedesmus quadricauda</i>)

Further information

Water hazard class:	1
	Do not let product contaminate ground water, waterways or sewage system.

13. Disposal Considerations

Waste Treatment Methods

Product:	In accordance with current regulations, product may be taken to an incineration plant. If possible reuse product.
European Waste Code (EWC):	The waste code is determined according to the code of the European Waste Catalog.
Uncleaned packaging:	Dispose of according to official local regulations. Uncontaminated packaging may be disposed of in the same manner as the product.

14. Transport Information

Road Transportation ADR/RID

Class:	3
Packaging group:	II
UN No.:	1993
Classification code:	F1
Tunnel No.:	D/E
Hazard No.:	3
Correct technical name:	FLAMMABLE LIQUID, N.O.S. (Ethanol)

Sea transportation

IMDG/GGVSee Class:	3
Packaging group:	II
UN No.:	1993
EmS No.:	F-E,S-E
Hazard No.:	3
Correct technical name:	FLAMMABLE LIQUID, N.O.S. (Ethanol)

Air transportation

ICAO/IATA Class:	3
Packaging group:	II
UN No.:	1993
Hazard No.:	3
Correct technical name:	FLAMMABLE LIQUID, N.O.S. (Ethanol)

Environmental hazards:	Labelling according 5.2.1.8 ADR/RID: no Labelling according 5.2.1.6.3 IMDG: no Classification as hazardous according 2.9.3 IMDG: no
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Special precautions for user:
not applicable

Transportation in bulk according to Annex II of MARPOL 73/78 and IBC-Code:
IMDG: not applicable

15. Regulatory Information

Employment restrictions:	The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline (94/85/EEC) are to be observed.
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Revised edition: 06.06.2011

Employment restrictions:	The employment restrictions for young workers in accordance with the Youth Employment Protection Law (94/33/EC) are to be observed.
Water hazard class:	1, slightly hazardous for water
<i>Chemical Safety Assessment</i>	
Chemical safety assessment:	No information available. A Chemical Safety Assessment has not yet been carried out for this product.

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.