



# Safety Data Sheet

## Kromakote Ultrafleet 4000

Last Revision 01/07/2015

 Version:

V-2015-001  
HR-1001/S.1001/M.1001

### 1. Chemical Product and Company Identification

Chemical name: Aqueous Acrylate-Polyurethane dispersion

Using as: Transparent Clearcoat for PVC-films and tarpaulins

Supplier: **Ochre Finishing Technologies Ltd**  
17 The Square  
Cawsand  
PL10 1PF  
Cornwall UK  
Tel.: 0044 - (0) 1752 - 934393  
Email: [info@ochreuk.com](mailto:info@ochreuk.com)

Emergency: 07824 995901

### 2. Composition / Information on Ingredients

	CAS-No.	EINECS / ELINCS No.	Symbol	R-Phrases	Concentration
N-Methyl-2-pyrrolidone	872-50-4	212-828-1	T	R 36/37/38 R 61	< 7,5%
Triethylamine (in neutralized form)	121-44-8	204-469-4	F, C	R 11 R 20/21/22 R 35	< 1%

See section 16 for the full text of the symbols and the R-Phrases declared above.

### 3. Possible Hazards

This health hazard assessment is based on a consideration of the composition of this product.  
Irritating to eyes, respiratory system and skin.



#### 4. First Aid Measures

- Inhalation:** Remove patient from exposure, to fresh air, keep warm and at rest. Obtain medical attention if ill effects occur.
- Skin contact:** Remove contaminated clothing. Wash skin with soap and water. Apply skin-protective cream. If symptoms develop, obtain medical attention.
- Eye contact:** If substance has got into the eyes, immediately wash out with plenty of water until medical assistance is provided. Retract eyelids open. Consult an eye specialist.
- Ingestion:** Wash out mouth with water. Obtain medical attention if ill effects occur.  
Further Medical Treatment: Symptomatic treatment and supportive therapy as indicated.

#### 5. Fire-fighting Measures

Not classed as flammable. If involved in a fire, it may emit noxious and toxic fumes.

- Extinguishing media:** Foam, dry powder, CO<sub>2</sub>, water spray.
- Unusual fire/explosion hazards:** Do not use full water jet.
- Special exposure hazards:** If involved in a fire, it may emit gases which are dangerous for health. These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>). Avoid breathing vapours.
- Special precautions:** Wear breathing apparatus, safety wear.

#### 6. Accidental Release Measures

- Personal precautions:** Change contaminated clothing. Avoid contact with skin and eyes. Avoid breathing vapours.
- Environmental precautions:** Do not allow to enter sewers, surface or ground water.
- Methods for cleaning:** Absorb spillages in sand, earth or any suitable absorbent material. Transfer to a container for disposal. Do not allow to enter sewage system. In the event of major spillage: Clean up only under supervision of an expert. In the event of minor spillage: Absorb in sand or other inert material.
- Further information:** Slip hazard on the floor.  
Collect spilled material. Disposal according to the local legislation.



## 7. Handling and Storage

### Handling:

#### General advices:

Wash hands before breaks and at the end of work.  
Use only in well-ventilated areas. Handle and open container with care.  
Do not breathe gas/fumes/vapour/spray.  
Local exhaust required. Use personal protective equipment as described in section 8.

#### Advices for fire and explosion protection:

In normal cases no special measures are required.  
Water may be used to cool closed containers to prevent pressure build-up.

### Storage:

#### Requirements for storage and containers:

Stainless steel container, polyethylene drums.

#### Further information for storage:

Keep container dry.  
Keep container tightly closed in a cool, well-ventilated place.  
Keep away from frost and heat. Store between 5°C and 40°C.

**Storage-class:** Not applicable

## 8. Exposure Controls and Personal Protection

**Exposure controls:** Avoid contact with skin and eyes.  
Do not breathe vapour/spray.  
Use only in well-ventilated areas.

CAS-No.	Ingredient name	%	Type	Value
872-50-4	N-Methyl-2-pyrrolidione	7,5	MAC	80 mg/m <sup>3</sup>
121-44-8	Triethylamine	1	MAC	8 mg/m <sup>3</sup>

Further information: none

**Protective equipment:** General protective and hygienic measures.

**Respiratory protection:** If workplace exposure limits are exceeded -> respirations protection.  
**Hand protection:** Butyl Rubber or Neopren gloves.  
**Eye protection:** Safety glasses with side protection shield.  
**Skin protection:** Safety wear.

## 9. Physical and Chemical Properties

### Appearance:

Physical state: liquid  
Colour: slightly beige  
Odour: characteristic

### Safety relevant data:

Initial boiling point/range: approx. 100°C  
Melting point/range: approx. 0°C  
Flash point: not applicable  
Flammability: not applicable  
Ignition temperature: not applicable  
Self-flammability: not applicable  
Oxidising properties: none

Explosion limit: not applicable  
Vapour pressure (20°C): approx. 23 mbar  
Density (20 °C): 1,05 g/cm<sup>3</sup>

Solubility in water: fully miscible with water  
Solids content: 36 - 42%  
pH-Value: 7,0 - 8,0  
Viscosity (4 mm flow cup): 15 - 40 sec. depends on application  
Solvent disconnection: undetermined  
Solvent: N-Methyl-2-pyrrolidione (NMP): < 7,5%

Further information: none

**10. Stability and Reactivity**

Stable under normal conditions. The material will not support combustion unless the water has evaporated.

**Conditions to be avoided:**

At temperatures higher than 100°C -> phase separation, possible coagulation.

**Substances to be avoided:**

Avoid contact with substances, which reacted with water.

**Dangerous reactions:**

At temperatures higher than 300°C -> carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>), aliphatic fragments and possibly HCN. Not valid for normal manufacturing.

**Further information:**

none

## 11. Toxicological Information

### Acute toxicity:

Classification relevant LD<sub>50</sub> / LC<sub>50</sub>-Value:

Ingredient name	Route	Value	Species
N-Methyl-2-pyrrolidione	oral	3914 mg/kg	rat
	dermal	8000 mg/kg	rabbit
	inhalativ	>5,1 mg/15 min.	rat
Triethylamine	oral	460 mg/kg	rat
	dermal	570 mg/kg	rabbit
	inhalativ	1000 ppm/4 h	rat

### Local effects:

<b>Inhalation:</b>	Causes irritation on respiratory tract.
<b>Ingestion:</b>	Low oral toxicity.
<b>Skin contact:</b>	Causes skin irritation.
<b>Eye contact:</b>	Causes eyes irritation.
<b>Sensitisation:</b>	No information.
<b>Long term exposure:</b>	No information.

## 12. Ecological Information

<b>General advices:</b>	Do not release to the environment without chemical precipitation/flocculation. The precipitate is not hazardous.
<b>Ecotoxicity:</b>	
<b>Aqua toxicity:</b>	Fish toxicity LC <sub>50</sub> : >500 mg/l.
<b>Waste water treatment plant:</b>	Bacteria toxicity EC0: > 10 000 mg/kg.
<b>Water Hazard Class (Ger.):</b>	WGK 1 (self-assessment): slightly hazardous for water.

## 13. Disposal Considerations

<b>Product:</b>	
<b>Recommendation:</b>	Disposal according to the local legislation. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

### Contaminated packages

Recommendation: Water may be used.

Contaminated packages must be cleaned before they can be recycled.  
Non-cleaned packages must be considered as a chemical waste-product.

## 14. Transport Information

No transport classification is applicable. The product does not constitute a hazardous substance in national/international road, rail, sea air transport.

### Land-/Road-/rail transport:

ADR/RID-GGVS/GGVE-class: not applicable

### Inland waterways transport:

ADN/ADNR-class: not applicable

### Sea transport:

IMDG/GGVSEE-class: not applicable

### Air transport:

ICAO/IATA-class: not applicable

## 15. Regulatory Information

Classification:



**Xi** **Irritant**

### Risk Phrases

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 61 May cause harm to the unborn child.

### Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 41 In case of fire and/or explosion do not breathe fumes.

## 16. Other Information

Full text of classifications referred to in sections 2 and 3.

R 11                    Highly flammable.  
R 20/21/22:        Harmful by inhalation, in contact with skin and if swallowed.

R 35                    Causes severe burns.  
R 36/37/38        Irritating to eyes, respiratory system and skin.  
R 37                    Irritating to respiratory system.  
R 61                    May cause harm to the unborn child.

F                      Highly flammable  
C                      Caustic  
T                      Toxic  
Xi                     Irritant  
Xn                     Detrimental to health

### **Further Information:**

This security data sheet replaces all previous editions. Validly from edition date.

This information reflects our current state of the art and it is intended to inform on our products and its use possibilities. They cannot deduce any legally binding guarantee regarding specific properties of the products or their suitability for definite applications. Rights regarding trademarks and patents also will have to be observed.

Ochre Finishing Technologies Ltd excludes each liability for damages, that can appear in improper with these chemicals.

Date of last revision / Version:                    01.07.15                    V-2015-001                    HR-1001/S.1001/M.1001