

MATERIAL SAFETY DATA SHEET

according to 91/155 EC

1228000

Reviewed on: 17.05.2004

Printing date: 17.05.2004

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:**
ALPOCRYL enamel LE
- **Article number:**
539300
- **Application of the substance / the preparation**
Coating material
- **Manufacturer/Supplier:**
AVKO Limited
Hamble Court Business Park, Hamble Lane
Hamble, Southampton, SO31 4QJ
Tel. 00 44 23 80 455 855 Fax. 00 44 23 80 456 785
- **Further information obtainable from:**
Product safety department.
- **Information in case of emergency:**
Emergency telephone: Office Hours: Environmental Protection Dept. Fire Brigade. Out of Hours: Fire Brigade

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:**
Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:**

CAS NO.	Description Index R-phrases	%
112-07-2	2-butoxyethyl acetate EINECS: 203-933-3 Xn 20/21	1,25- 2,50
123-86-4	n-butyl acetate EINECS: 204-658-1 10-66-67	25,00- 50,00
1330-20-7	xylene (mix) EINECS: 215-535-7 Xn 10-20/21-38	12,50- 25,00
100-41-4	ethylbenzene EINECS: 202-849-4 F Xn 11-20	2,50- 5,00
141-78-6	ethyl acetate EINECS: 205-500-4 F Xi 11-36-66-67	5,00- 12,50

3 Hazards identification

- **Hazard description:**



F Highly flammable



Xn Harmful

- **Information concerning particular hazards for human and environment:**

R 11 Highly flammable.
R 20/21 Harmful by inhalation and in contact with skin.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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4 First-aid measures

- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:**
Mount respiratory protective device.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Take note of emission threshold.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

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8 Exposure controls/personal protection

- **Ingredients with limit values that require monitoring at the workplace:**

CAS No.	Designation of material		
123-86-4	n-butyl acetate		
OEL			
	Short-term value	966	mg/m3
		200	ppm
	Long-term value	724	mg/m3
		150	ppm
1330-20-7	xylene (mix)		
OEL			
	Short-term value	662	mg/m3
		150	ppm
	Long-term value	441	mg/m3
		100	ppm
	Sk		
100-41-4	ethylbenzene		
OEL			
	Short-term value	552	mg/m3
		125	ppm
	Long-term value	441	mg/m3
		100	ppm
141-78-6	ethyl acetate		
OEL			
	Long-term value	1460	mg/m3
		400	ppm

- **Additional information:**
The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Avoid contact with the eyes and skin.
Do not eat or drink while working.
Be sure to clean skin thoroughly after work and before breaks.
- **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves Impervious gloves
- **Eye protection:** Safety glasses Tightly sealed goggles
- **Body protection:** Protective work clothing

9 Physical and chemical properties

Appearance	
Form:	Liquid
Colour:	Different according to colouri
Odour:	Solvent-like
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	76,0 °C
Flash point:	-5,0 °C
Ignition temperature:	425,00 °C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1,10 Vol %
Upper:	7,50 Vol %
Vapour pressure:	at 20,00 °C 6,70 mbar at 50,00 °C 55,00 mbar

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Density:	0,9800 - 1,2000 g/cm ³
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Viscosity:	
Kinematic:	at 23,00 °C 300,00 - 400,00 mPa.s
Solvent content:	
Organic solvents:	70,00 %
Solids content:	37,94 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous decomposition products:**
No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
 - 7631-86-9 silicon dioxide, chemically prepared**
Oral, LD50: 10000 *** (rat)
 - 112-07-2 2-butoxyethyl acetate**
Oral, LD50: 2400 *** (rat)
Dermal, LD50: 1580 *** (Rabbit)
 - 123-86-4 n-butyl acetate**
Oral, LD50: 14000 *** (rat)
Inhalative, LC50/4h: >21.0 *** (rat)
 - 1330-20-7 xylene (mix)**
Oral, LD50: 8700 *** (rat)
Dermal, LD50: 2000 *** (Rabbit)
Inhalative, LC50/4h: 6350 *** (rat)
 - 100-41-4 ethylbenzene**
Oral, LD50: 3500 *** (rat)
Dermal, LD50: 17800 *** (Rabbit)
 - 141-78-6 ethyl acetate**
Oral, LD50: 4935 *** (Rabbit)
Inhalative, LC50/4h: 1600 *** (rat)
 - 108-88-3 toluene**
Oral, LD50: 5000 *** (rat)
Dermal, LD50: 12124 *** (Rabbit)
Inhalative, LC50/4h: 5320 *** (mouse)
 - 78-83-1 butanol**
Oral, LD50: 2460 *** (rat)
Dermal, LD50: 4200 *** (Rabbit)
- **Primary irritant effect:**
- on the skin:
No irritant effect.
- on the eye:
No irritating effect.
- **Sensitization:**
No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful.

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12 Ecological information

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (#): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Waste disposal key:**
55508 Paint material
waste disposal indications
special waste burn
- **European waste catalogue**
08
WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01
wastes from MFSU and removal of paint and varnish
08 01 02
waste paints and varnish free of halogenated solvents
- **Waste disposal key (CH):**
1620
Painting, lacquer and adhesive wastes with organic phase (with solvents)
- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.

14 Transport information

<ul style="list-style-type: none"> • Land transport ADR/RID (cross-border) 	
ADR/RID class:	3 Flammable liquids.
Danger code (Kemler):	33
UN-Number:	1263
Packaging group:	II
Hazard label	
Description of goods:	1263 PAINT, SPECIAL PROVISION 640D
<ul style="list-style-type: none"> • Maritime transport IMDG: 	
IMDG Class:	3
UN Number:	1263
Label	
Packaging group:	II
EMS Number:	F-E,S-E
Proper shipping name:	PAINT
<ul style="list-style-type: none"> • Air transport ICAO-TI and IATA-DGR: 	

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ICAO/IATA Class: 3
UN/ID Number: 1263
Label



Packaging group: II
Proper shipping name: PAINT

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



F Highly flammable



Xn Harmful

- **Hazard-determining components of labelling:**
xylene (mix)
- **Risk phrases:**
R 11 Highly flammable.
R 20/21 Harmful by inhalation and in contact with skin.
- **Safety phrases:**
S 36/37 Wear suitable protective clothing and gloves.
S 51 Use only in well-ventilated areas.
S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 29 Do not empty into drains.
S 33 Take precautionary measures against static discharges.

- **National regulations:**
- **Classification according to VbF:**

- AI
- **Technical instructions (air):**
- **Class Share in %**
II 19,14
III 42,89
III 0,01

- **Waterhazard class:**
Water hazard class 2 (#): hazardous for water. Self-assessment

Further information

BAGT-Number 619004
Swiss class of toxicity 4

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
R 20/21 Harmful by inhalation and in contact with skin.
R 10 Flammable.

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|------------------------------------|---|
| R 11 | Highly flammable. |
| R 20 | Harmful by inhalation. |
| R 36 | Irritating to eyes. |
| R 66 | Repeated exposure may cause skin dryness or cracking. |
| R 38 | Irritating to skin. |
| R 67 | Vapours may cause drowsiness and dizziness. |
| • Department issuing MSDS: | |
| Environment protection department. | |