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

Identification of the substance or preparation

Trade name

WorléeCryl A 2241 W
45% in water / butyl glycol / aromat. HC 155-180

Company / undertaking identification

Address

Worlée - Chemie G m b H
Söllerstraße 12 - 16
D-21481 Lauenburg

Telephone no. + 49 (0) 4153 / 596 - 0

Fax no. + 49 (0) 4153 / 536 49

Information provided by / telephone

Product safety +49 (0) 4153 / 596 - 0
E-Mail: msds@ch.worlee.de

Emergency telephone number

+ 49 (0) 551-19240 Toxic Substances Information Centre North (Germany)

Use of the substance / preparation

Raw materials for coatings, sealants and adhesives.

2.) Hazards identification

Specific information regarding risks for humans / the environment

The product does not need to be labelled in accordance with directive 1999/45/EC. No special hazards to be mentioned. We recommend to refer to the Material Safety Data sheet for further detailed information.

3.) Composition / information on ingredients

Chemical characterization

Dissolved acrylic resin (preparation)

(Hazardous) ingredients

1,3,5-TRIMETHYLBENZENE

CAS no.	108-67-8			
EINECS no.	203-604-4			
Concentration	>= 0,1	<	0,5	%-b.w.
Classification	R10 Xi;R37 N;R51/53			

2-BUTOXY-ETHANOL

CAS no.	111-76-2			
EINECS no.	203-905-0			
Concentration	>= 5	<	7	%-b.w.
Classification	Xn;R20/21/22 Xi;R36/38			

1,2,4-TRIMETHYLBENZENE

CAS no.	95-63-6				
EINECS no.	202-436-9				
Concentration	>=	0,5	<	1	%-b.w.
Classification	R10 Xn;R20 Xi;R36/37/38 N;R51/53				

SOLVENT NAPHTA (PETROLEUM), LIGHT AROMATIC

CAS no.	64742-95-6				
EINECS no.	265-199-0				
Concentration	>=	1	<	2	%-b.w.
Classification	N;R51/53 Xn;R65 R66 R67				

WATER

CAS no.	7732-18-5				
Concentration	>=	45	<	50	%-b.w.

POLYACRYLATE, AMMONIUM SALT

Concentration	>=	45	<	50	%-b.w.

4.) First aid measures

General information

If the patient is unconscious, place and transport in stable sideways position. Do not induce vomiting or give liquor if the injured person is unconscious or has
convulsions. If symptoms persist seek medical attention. In any case show the physician the Safety Data Sheet.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Remove the casualty into fresh air and keep at rest.

After skin contact

Remove contaminated clothing and shoes immediately and clean thoroughly before reuse. Do not allow the product to dry on the skin. Wash effected area immediately with plenty of water and soap.

After eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Begin with medical treatment.

After ingestion

Do not induce vomiting without medical advice. Seek medical attention.

Advice to doctor

Symptoms

When inhaled or swallowed depending on the time and amount, it can give rise to the following symptoms: headaches, giddiness, tiredness, nausea, vomiting, irregular heart beat, intoxication, unconsciousness, asphyxiation and fatality.

5.) Fire-fighting measures

Suitable extinguishing media

Foam; Carbon dioxide; Dry chemical extinguisher; Water spray jet

Extinguishing media which must not be used for safety reasons

High volume water jet

Special exposure hazards arising from the substance or preparation itself, its combustion products or resulting gases

Fire will produce dense black smoke containing hazardous combustion products. In the event of fire the following substances can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Nitrogen oxides (NOx)

Special protective equipment for fire-fighters

Wear a self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6.) Accidental release measures

Personal precautions

Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Do not discharge into the drains / surface waters / groundwater. Prevent spread over a wide area e.g. by containment or oil barriers.

Methods for cleaning up

Soak up with inert absorbent material e.g. sand, kieselguhr, universal binder. Containers in which spilt substance has been collected must be adequately labelled. When picked up, treat material as prescribed under heading 13 "Disposal".

7.) Handling and storage

Handling

Advice on safe handling

Provide good ventilation of working area. The level of risk involved in product handling must be reduced to a minimum by means of protective and preventive measures. The working procedure should be planned as far as allowed by state-of-the-art technology so as to avoid release of hazardous substances or prevent skin contact.

Notes for prevention of fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours may form an explosive mixture with air.

Storage

Requirements for storage rooms and vessels

Provide fixed floor container without outlet. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Appropriate material:	Lined steel; Glass; Polyethylene
Inappropriate material	Unlined steel

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place. Protect from frost. Protect from direct sunlight.

Recommended storage temperature

Value	5	-	25	°C

8.) Exposure controls / personal protection

Additional advice on technical system design

No action in addition to the ones mentioned in chapter 7 are necessary.

Ingredients with occupational exposure limits to be monitored

2-BUTOXY-ETHANOL

OES/EH40				
Value	25	ml/m³	123	mg/m³
Skin resorption / sensitization	Sk			
2000/39/EC				
Value	20	ml/m³	98	mg/m³
STEL	50	ml/m³	246	mg/m³
Skin resorption / sensitization	skin			

1,2,4-TRIMETHYLBENZENE

2000/39/EC				
Value	20	ml/m³	100	mg/m³
OES/EH40				
Value	25	ml/m³	125	mg/m³

Personal protection equipment

Respiratory protection

If the occupational exposure limits are exceeded, suitable respiratory protective equipment must be worn. If no occupational exposure limits are defined, sufficiently effective respiratory protective measures must be taken in the presence of aerosols and vapours.

Respiratory filter (gas) A2/AX

Hand protection

If there is a potential for product skin contact, use of gloves tested to e.g. EN 374 will provide sufficient protection. Protective gloves should in any case be tested for workplace-specific suitability (e.g. mechanical resistance, product compatibility, antistatic properties). Comply with instructions and information provided by the glove manufacturer concerning use, care and replacement of the gloves. Replace protective gloves immediately upon damage or at the first signs of wear. As far as possible, plan work procedures so that wearing gloves will not be necessary.

Appropriate material:	Nitrile		
Material thickness	>	0,4	mm
Permeation time	>	480	min

Eye protection

Safety goggles with lateral shielding (DIN EN 166)

Skin protection

Usual working clothes for the chemical industry, suitable for the job.

General protective and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Use protective skin cream for preventive skin protection. Clean skin thoroughly after work. Apply skin cream.

9.) Physical and chemical properties

Appearance

Form	Liquid, viscous
Colour	White
Odour	Solvent-like

Important health, safety and environmental information

Changes in physical state

Type	Starts to boil at:		
Value	appr.	100	℃

Flash point

Value	56	-	60	℃
Method	DIN EN 22719			

Oxidizing properties

Remarks	Not oxidizing

Explosion limits

Upper explosion limit	10,6	vol. %
Lower explosion limit	1,1	vol. %
Reference substance	2-BUTOXY-ETHANOL	

Vapour pressure

Value	2,3		kPa
Reference temperature	20	℃	
Value	12,3		kPa
Reference temperature	50	℃	
Method	Value taken from the literature		
Reference substance	WATER		

Density

Value	1,038		g/cm³
Method	DIN EN ISO 2811-1		
Reference temperature	20	℃	

Viscosity

Value	max. 25000		mPa*s
Method	DIN EN ISO 2555		
Reference temperature	20	℃	

Solubility in water

Remarks	Miscible

pH value

Value	7	-	9
Reference temperature	20	℃	
Method	DIN ISO 976		

n-Octanol / water partition coefficient (log Pow)

Remarks	Not determined

10.) Stability and reactivity

Conditions to avoid

The product is combustible. Keep away from excessive heat, sparks or open fire. Protect from frost. Protect from direct sunlight.

Materials to avoid

Strong oxidising agents

Hazardous decomposition products

Thermal disintegration depends to a great extent on the external conditions. A complex mixture of solids, liquids and gases forms in the air, including among other substances carbon dioxide, carbon monoxide and other organic compounds, when this material is burnt or is thermally or oxidatively degraded.

11.) Toxicological information

Acute toxicity

Acute toxicity / further data

Reference substance	**POLYACRYLATE**			
LD50	>	2000		mg/kg
Species	Rat			
Route of exposure	Oral			
Reference substance	**2-BUTOXY-ETHANOL**			
LD50		470		mg/kg
Species	Rat			
Route of exposure	Oral			
LD50		220		mg/kg
Species	Rabbit			
Route of exposure	Dermal			
LC50		2,2		mg/l
Species	Rat			
Route of exposure	Inhalation			
Duration of exposure		4	h	

Experience in practice

Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness. Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. Eye contact with the product may lead to irritation.

Other information

Product specific toxicological data are not known. The toxicological data mentioned are derived from a similar product.

12.) Ecological information

Ecotoxic effects

Toxicity / other aquatic organisms

Reference substance	**POLYACRYLATE**				
EC50	>	1000			mg/l
Species	Daphnia magna				
Duration of exposure		48	h		
Reference substance	**2-BUTOXY-ETHANOL**				
LC50		1250			mg/l
Species	Menidia beryllina				
Duration of exposure		96	h		
LC50		1490			mg/l
Species	Lepomis macrochirus				
Duration of exposure		96	h		
EC50		1698	-	1940	mg/l
Species	Daphnia magna				
Duration of exposure		24	h		

Degradability

Remarks: In view of the desired stability the polymer substance is only slightly biodegradable.

General information / ecology

Do not allow spillage to soil, waterways or waste water canal. Product specific ecotoxicological data are not known. The information regarding ecotoxic effecs was derived from products of similar structure or composition.

13.) Disposal considerations

Product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.
Incineration in suitable incineration plant, observing local authority regulations.

Uncleaned packaging

Product residues must be emptied out of packaging material, which must then be disposed of in the proper fashion in agreement with legal regulations. Packaging from which residues have not been removed must be disposed of in co-operation with the regional disposal authority.

14.) Transport information

Land transport ADR/RID

Class	3
Packaging group	III
Hazard id. no.	30
Label	3
UN number	1866
Technical name	RESIN SOLUTION
Remarks	The product is viscous. Containers with a capacity <= 450 litres are not subject to ADR according to paragraph 2.2.3.1.5 ADR. Special Provision SP 640(E)

Marine transport IMDG/GGVSee

Class	3
Packaging group	III
UN number	1866
Proper shipping name	RESIN SOLUTION
EmS	F-E, S-E
MARPOL	--
Label	3
Remarks	Containers with a capacity not exceeding 30 ltrs are according to 2.3.2.5. not subject to the regulations of the IMDG code.

Air transport ICAO/IATA

Class	3
Packaging group	III
UN number	1866
Proper shipping name	RESIN SOLUTION
Label	3

15.) Regulatory information

Labelling in accordance with EC directives

The product does not require a hazard warning label in accordance with EC directives.

Special labelling for certain preparations

Safety data sheet available for professional user on request.

Decree for case of interference

Remarks	[P_ID:6007467!]

16.) Other information

1,3,5-TRIMETHYLBENZENE

10	Flammable.
37	Irritating to respiratory system.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2-BUTOXY-ETHANOL

20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
36/38	Irritating to eyes and skin.

1,2,4-TRIMETHYLBENZENE

10	Flammable.
20	Harmful by inhalation.
36/37/38	Irritating to eyes, respiratory system and skin.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SOLVENT NAPHTA (PETROLEUM), LIGHT AROMATIC

51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.