SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CONLOC UV 665

Product group: Adhesives

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

UV curing adhesive

1.3. Details of the supplier of the safety data sheet

Company name:	EGO Dichtstoffwerke GmbH & Co. Betriebs KG	
Street:	Kaltenbrunn 27	
Place:	D-82467 Garmisch-Partenkirchen	
Telephone:	+49 (0)8821 956 90	Telefax: +49 (0)8821 956 990
e-mail:	info@ego.de	
Contact person:	Laboratory	Telephone: +49 (0)8821 956 960
e-mail:	EGO-Labor@ego.de	
Internet:	www.ego.de	

1.4. Emergency telephone number:

+49 55119240 (24h/7d)
GIZ-Nord, Göttingen
Member of EPECs network

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Isobornyl acrylate
2-hydroxyethyl methacrylate
Acrylsäure
maleic acid
tert-Butylperbenzoat

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing Vapor / spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

Do not expose skin and above all eyes to direct or reflected UV light during curing.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances listed below with nonhazardous additions.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
5888-33-5	Isobornyl acrylate			< 50 %
	227-561-6			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H315 H319 H317 H335 H400 H410			
868-77-9	2-hydroxyethyl methacrylate			< 25 %
	212-782-2	607-124-00-X		
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
7473-98-5	2-Hydroxy-2-methylpropiophenone			< 5 %
	231-272-0			
	Acute Tox. 4, Aquatic Chronic 3; H302 H412			
79-10-7	Acrylsäure			<5 %
	201-177-9		01-2119452449-31	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 2; H226 H332 H312 H302 H314 H318 H335 H400 H411			
614-45-9	tert-Butylperbenzoat			< 1 %
	210-382-2			
	Self-react. C, Acute Tox. 4, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1; H242 H332 H315 H317 H400			
110-16-7	maleic acid			< 1 %
	203-742-5	607-095-00-3		
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H302 H315 H319 H317 H335			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
5888-33-5	227-561-6	Isobornyl acrylate	< 50 %
	dermal: LD50 = > 3000 mg/kg; oral: LD50 = 4350 mg/kg		
868-77-9	212-782-2	2-hydroxyethyl methacrylate	< 25 %
	oral: LD50 = 5050 mg/kg		
7473-98-5	231-272-0	2-Hydroxy-2-methylpropiophenone	< 5 %
	dermal: LD50 = 6929 mg/kg; oral: LD50 = 1694 mg/kg		
79-10-7	201-177-9	Acrylsäure	<5 %
	inhalation: LC50 = >5,1 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 640 mg/kg; oral: LD50 = 1500 mg/kg		
614-45-9	210-382-2	tert-Butylperbenzoat	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 1012 mg/kg		
110-16-7	203-742-5	maleic acid	< 1 %
	oral: ATE = 500 mg/kg Skin Sens. 1; H317: >= 0,1 - 100		

Further Information

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately. First aider needs to protect himself. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air in case of accidental inhalation of vapours. Consult physician if problems persist. If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Consult a physician. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

If swallowed with subsequent vomiting, aspiration into the lungs may occur, resulting in chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder, Foam, Carbon dioxide (CO_2).

Extinguishing materials should be selected according to the surrounding area.

Unsuitable extinguishing media

High volume water jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

5.3. Advice for firefighters

In the event of fire and/or explosion do not breathe fumes.
In the event of fire, wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation. Do not breath vapour. Wear personal protection equipment. Avoid contact with skin, eye and clothing.

For non-emergency personnel

Remove from all sources of ignition. Provide adequate ventilation. Wear personal protection equipment.

For emergency responders

Wear personal protection equipment.

6.2. Environmental precautions

Prevent allover extension (e.g.knocking-down or a boom).
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

For containment

Cover the sewers.

For cleaning up

Small amounts: Wipe up with absorbent material (e.g. cloth, fleece).
Substantial quantities: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the assimilated material according to the section on waste disposal.

Other information

Provide adequate ventilation.

6.4. Reference to other sections

see chapter: 7, 8, 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms. Keep away from direct sunlight. Avoid the formation of aerosol.

Advice on protection against fire and explosion

Keep away from heat.

Advice on general occupational hygiene

When using, do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Wash hands when done working with material; at breaks, lunch, shift changes, etc. Take off immediately all contaminated clothing
Avoid contact with the skin and the eyes. Ensure that eye flushing systems and safety showers are located close to the working place.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place. Protect against light. Never return unused material to storage receptacle.

Hints on joint storage

Not required

7.3. Specific end use(s)

Adhesives

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m³	fib/cm³	Category	Origin
79-10-7	Acrylic acid; Prop-2-enoic acid	10	29		TWA (8 h)	
		20	59		STEL (1 min)	

Additional advice on limit values

2-Hydroxyethylmethacrylat
MAK see chapter IIb

8.2. Exposure controls

Appropriate engineering controls

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
Do not expose skin and above all eyes to direct or reflected UV light during curing.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields.

Hand protection

Protective gloves: Glove material Nitrile rubber (>= 0,4 mm) Break through time > 8h.
As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Skin protection

Long sleeved clothing

Respiratory protection

Ensure adequate ventilation, especially in confined areas.
In case of insufficient ventilation wear suitable respiratory equipment.
For short-term or low-load respiratory filter device (filter A); in case of intensive or prolonged exposure use self-contained breathing apparatus

Thermal hazards

Do not heat the product.
Under fire conditions: Flame-resistant clothing
Low temperature resistant gloves: not required

Environmental exposure controls

Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		>100 °C
pH-Value:		not determined
Water solubility:		insoluble
Partition coefficient n-octanol/water:		not determined
Density (at 25 °C):		approx. 1,1 g/cm³
Particle characteristics:		not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is: not Explosive.

Other safety characteristics

Solvent content:	0,0 %
Viscosity / dynamic: (at 25 °C)	100 mPa·s

Further Information

The product is: not auto-flammable

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Exposure to light.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

irritating gases / vapors

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
5888-33-5	Isobornyl acrylate					
	oral	LD50 mg/kg	4350	rat		
	dermal	LD50 mg/kg	> 3000	rabbit		
868-77-9	2-hydroxyethyl methacrylate					
	oral	LD50 mg/kg	5050	Rat		
7473-98-5	2-Hydroxy-2-methylpropiophenone					
	oral	LD50 mg/kg	1694	rat		
	dermal	LD50 mg/kg	6929	rat	OECD Test Guideline 402	
79-10-7	Acrylsäure					
	oral	LD50 mg/kg	1500	rat		
	dermal	LD50 mg/kg	640	rabbit		
	inhalation (4 h) vapour	LC50	>5,1 mg/l	rat	OECD Test Guideline 403	
	inhalation dust/mist	ATE	1,5 mg/l			
614-45-9	tert-Butylperbenzoat					
	oral	LD50 mg/kg	1012	rat		
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
110-16-7	maleic acid					
	oral	ATE mg/kg	500			

Irritation and corrosivity

Serious eye damage/eye irritation

Causes skin irritation.

Sensitising effects

May cause sensitisation by skin contact.

Carcinogenic/mutagenic/toxic effects for reproduction

not defined

STOT-single exposure

not defined

STOT-repeated exposure

not defined

Aspiration hazard

Inhalation may cause respiratory irritation.

Information on likely routes of exposure

Skin contact, Inhalation

Specific effects in experiment on an animal

This information is not available.

Practical experience

This information is not available.

SECTION 12: Ecological information

12.1. Toxicity

Toxic for Fish. Toxic to aquatic organisms.

Do not empty into drains or the aquatic environment. Leakage of alredy small quantities into the soil hazardous to drinking water

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
5888-33-5	Isobornyl acrylate						
	Acute fish toxicity	LC50	1,8 mg/l	96 h	Danio rerio (zebra fish)		
	Acute algae toxicity	ErC50	2,7 mg/l	96 h	Pseudokirchneriella subcapitata (green algae)		
	Acute crustacea toxicity	EC50	1,1 mg/l	48 h	Daphnia magna (Water flea)		
868-77-9	2-hydroxyethyl methacrylate						
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas		
7473-98-5	2-Hydroxy-2-methylpropiophenone						
	Acute crustacea toxicity	EC50	119 mg/l	48 h	Toxicity to daphnia	OECD Test Guideline 202	
79-10-7	Acrylsäure						
	Acute algae toxicity	ErC50 mg/l	0,13	72 h	Scenedesmus capricornutum (fresh water algae)		
	Crustacea toxicity	NOEC	19 mg/l	21 d	Daphnia magna (Water flea)		

12.2. Persistence and degradability

not defined

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
79-10-7	Acrylsäure			
	OECD Test Guideline 301	81%		
	Easily biodegradable (concerning to the criteria of the OECD); aerobic			

12.3. Bioaccumulative potential

not defined

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
868-77-9	2-hydroxyethyl methacrylate	0,47
79-10-7	Acrylsäure	0,46

BCF

CAS No	Chemical name	BCF	Species	Source
79-10-7	Acrylsäure	3,16		OECD Test Guideline 107

12.4. Mobility in soil

not defined

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

not defined

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of as special waste in compliance with local and national regulations.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Dispose of waste according to applicable local, state, and federal regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (isobornylacrylate, Acrylic acid)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Other applicable information (land transport)

The product is not subject to the other provisions of ADR when packaged in quantities not exceeding 5 l / 5 kg (SV 375)

Marine transport (IMDG)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate, Acrylic acid)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Special Provisions:	274, 335, 969
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-F
Segregation group:	acids

Other applicable information (marine transport)

The product may be transported according to IMDG Code, paragraph 2.10.2.7 if it is packed in quantities not exceeding 5 l / 5 kg.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate, Acrylic acid)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Special Provisions:	A97 A158 A197
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y964
Excepted quantity:	E1
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 L

Other applicable information (air transport)

The product is not subject to the other provisions of IATA if it is packed in quantities not exceeding 5 l / 5 kg (A197)

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

2004/42/EC (VOC): 0,0%

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 4,6,7,8,9,10,11,12,14,16.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

These data describe only the safety requirements for the product(s) and are based on our present knowledge. However, they do not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)