according to UK REACH Regulation

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

1.1. Product identifier

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

Use of the substance/mixture

Primer Adhesion promotor

1.3. Details of the supplier of the safety data sheet

Company name:	ENKE-Werk Johannes Enke GmbH	1 & Co. KG
Street:	Hamburger Str. 16	
Place:	D-40221 Düsseldorf - Germany	
Telephone:	+49(0)211/ 30 40 74	Telefax: +49(0)211/ 39 37 18
e-mail:	info@enke-werk.de	
e-mail (Contact person):	labor@enke-werk.de	
Internet:	www.enke-werk.de/en	
Responsible Department:	On weekdays between 7 a.m. and	4 p.m. +49 (0) 211/ 30 40 74
1.4. Emergency telephone	Emergency CONTACT (24-Hour-N	umber): GBK GmbH +49 (0) 6132-84463
<u>number:</u>		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation Flam. Liq. 2; H225

Acute Tox. 4; H332 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Xylene

4-methylpentan-2-one; isobutyl methyl ketone Hydrocarbons , C9 - C12 , n- alkanes , iso- alkanes, cyclic, aromatic (2-25 %)

Signal word: Pictograms: Danger



Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

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H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statemer	nts
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Solution of vinyl chloride polymers and solvents

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulation	•				
1330-20-7	Xylene			40 - 60 %		
	215-535-7		01-2119488216-32			
		Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304				
108-10-1	4-methylpentan-2-one; isobutyl n		10 - 30 %			
	203-550-1	606-004-00-4				
	Flam. Liq. 2, Carc. 2, Acute Tox. EUH066	51 H332 H319 H336				
64742-82-1	Hydrocarbons , C9 - C12 , n- alka	anes , iso- alkanes, cyclic, aromatic (:	2-25 %)	< 5 %		
	919-446-0					
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H304 H411 EUH066					

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				
1330-20-7	215-535-7 Xylene				
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg				
108-10-1	203-550-1 4-methylpentan-2-one; isobutyl methyl ketone				
	inhalation: ATE 11 mg/l (vapours); dermal: LD50 = >16000 mg/kg; oral: LD50 = 2080 mg/kg				
64742-82-1	919-446-0 Hydrocarbons , C9 - C12 , n- alkanes , iso- alkanes, cyclic, aromatic (2-25 %)				
	dermal: LD50 = ~ 3400 mg/kg; oral: LD50 = >15000 mg/kg				

according to UK REACH Regulation



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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Take up mechanically. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Aspiration hazard. Medical treatment necessary.

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

Treat symptomatically. Do NOT induce vomiting. Aspiration hazard!

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Powder, Foam, Water spray jet, Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

In case of fire may be liberated: Carbon monoxide; Carbon dioxide (CO2); Hydrochloric gas; Gases/vapours, harmful.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

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

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

Primer, Adhesion promotor

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
108-10-1	4-Methylpentan-2-one	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol		Post shift
108-10-1	4-methylpentan-2-one	4-methylpentan-2-one	20 µmol/L	urine	Post shift

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DNEL/DMEL values

CAS No	Substance							
DNEL type		Exposure route	Effect	Value				
64742-82-1	Hydrocarbons , C9 - C12 , n- alkanes , iso- alkanes, cyclic,	aromatic (2-25 %)						
Worker DNEL,	long-term	dermal	systemic	44 mg/kg bw/day				
Worker DNEL,	long-term	inhalation	systemic	330 mg/m³				
Consumer DN	EL, long-term	dermal	systemic	26 mg/kg bw/day				
Consumer DNEL, long-term		inhalation	systemic	71 mg/m³				
Consumer DN	EL, long-term	oral	systemic	26 mg/kg bw/day				

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Our recommendation is as follows: Suitable materials for prolonged, direct contact (at least protection index 6, corresponding to > 480 minutes permeation time according to EN 374): Neoprene®, Viton®, PVC, butyl or nitrile rubber. Dispose of contaminated gloves. With proper, optimized operation, only short-term contact and liquid splashes are to be expected, therefore, according to DGUV Information 212-007, a glove with a minimum protection class of 1 (<10 min permeation time) is sufficient. It must be ensured that the gloves are changed at short notice in case of chemical contact.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Fresh air mask. Short term filler device: A2 - P2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour:	Liquid transparent, light yellow		
Odour:	like: Solvent		
			Test method
Changes in the physical state			
Melting point/freezing point:		not determined	
Boiling point or initial boiling point and boiling range:		~ 80 °C	
Flash point:		11 °C	DIN ISO 53213
Flammability			
Solid/liquid:		not applicable not applicable	

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Lower explosion limits:	0,6 vol. %
Upper explosion limits:	6,5 vol. %
Auto-ignition temperature:	460 °C
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / dynamic:	10 - 50 mPa·s
Water solubility:	The study does not need to be conducted
	because the substance is known to be
	insoluble in water.
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 55 °C)	0,015 - 0,02 hPa
Density (at 20 °C):	~ 0,9 g/cm³
Relative vapour density:	not determined
9.2. Other information	
Information with regard to physical hazard cla	ISSES
Oxidizing properties	
Not oxidising.	
Other safety characteristics	
Solid content:	not determined
Evaporation rate:	not determined
Further Information	

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable, Ignition hazard.

10.2. Chemical stability

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The product is stable under storage at normal ambient temperatures. Upon overheating of the film, hydrogen chloride may split off

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No hazardous decomposition products if instructions for storage and handling are followed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

according to UK REACH Regulation

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Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalation vapour) 15,28 mg/l; ATE (inhalation dust/mist) 2,737 mg/l

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
1330-20-7	Xylene								
	dermal	ATE mg/kg	1100						
	inhalation vapour	ATE	11 mg/l						
	inhalation dust/mist	ATE	1,5 mg/l						
108-10-1	4-methylpentan-2-one; isobutyl methyl ketone								
	oral	LD50 mg/kg	2080	Rat	RTECS				
	dermal	LD50 mg/kg	>16000	Rabbit	IUCLID				
	inhalation vapour	ATE 11 mg	ı/I						
64742-82-1	Hydrocarbons , C9 - C12	, n- alkanes	, iso- alkane	es, cyclic, aromatic (2-25 %	6)				
	oral	LD50 mg/kg	>15000	Rat	OECD 401				
	dermal	LD50 mg/kg	~ 3400	Rabbit	OECD 402				

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (4-methylpentan-2-one; isobutyl methyl ketone) Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (Xylene)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Xylene)

Aspiration hazard

May be fatal if swallowed and enters airways.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



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CAS No	Chemical name	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
108-10-1	4-methylpentan-2-one; isc	4-methylpentan-2-one; isobutyl methyl ketone							
	Acute fish toxicity	LC50 540 mg/l	505 -	96 h	Pimephales promelas				
	Acute algae toxicity	ErC50	400 mg/l	96 h	Selenastrum capricornutum				
	Acute crustacea toxicity	EC50	170 mg/l	48 h	Daphnia magna	IUCLID			
64742-82-1	Hydrocarbons , C9 - C12	, n- alkanes	, iso- alkane	s, cyclic,	aromatic (2-25 %)				
	Acute fish toxicity	LC50	10 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203			
	Acute algae toxicity	ErC50	4,6 mg/l	72 h	Pseudokirchneriella subcapitata				
	Acute crustacea toxicity	EC50	10 mg/l		Daphnia magna (Big water flea)	OECD 202			

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-10-1	4-methylpentan-2-one; isobutyl methyl ketone	1,31

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

The product has not been tested.

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

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Containers have to be emptied completely and free of drops after final product removal. Emptied packages can be returned to the partners of Kreislaufsystem Blechverpackungen Stahl (Recycling system for metal containers).

Collection points are provided by the ENKE company as user of the mark.

List of Wastes Code - residues/unused products

according to UK REACH Regulation



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COATINGS (PAINT PRINTING INKS; wa	HE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF S, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND astes from MFSU and removal of paint and varnish; waste paint and varnish solvents or other hazardous substances; hazardous waste	
List of Wastes Code - used produc	ct	
COATINGS (PAINT PRINTING INKS; wa	HE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF 'S, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND astes from MFSU and removal of paint and varnish; waste paint and varnish solvents or other hazardous substances; hazardous waste	
Contaminated packaging Non-contaminated packages ma substance itself.	ay be recycled. Handle contaminated packages in the same way as the	
ECTION 14: Transport information	on	
and transport (ADR/RID)		
14.1. UN number or ID number:	UN 1263	
14.2. UN proper shipping name:	Paint	
14.3. Transport hazard class(es):	3	
14.4. Packing group:		
Hazard label:	3	
Classification code:	F1	
Special Provisions:	163 640D 650	
Limited quantity:	5 L	
Excepted quantity:	E2	
Transport category:	2	
Hazard No:	33	
Tunnel restriction code:	D/E	
land waterways transport (ADN)		
14.1. UN number or ID number:	UN 1263	
14.2. UN proper shipping name:	Paint	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	II	
Hazard label:	3	
Classification code:	F1	
Special Provisions:	163 640D 650	
Limited quantity:	5 L	
	E2	
Excepted quantity:		
larine transport (IMDG)	UN 1263	
arine transport (IMDG) <u>14.1. UN number or ID number:</u>		
arine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u>	UN 1263	
arine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u>	UN 1263 Paint	
arine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u>	UN 1263 Paint 3 II	
arine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label:	UN 1263 Paint 3 II 3	
Image: Arrow of the second system14.1. UN number or ID number:14.2. UN proper shipping name:14.3. Transport hazard class(es):14.4. Packing group:Hazard label:Marine pollutant:	UN 1263 Paint 3 II 3 No	
larine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label: Marine pollutant: Special Provisions:	UN 1263 Paint 3 II 3	
larine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label: Marine pollutant:	UN 1263 Paint 3 II 3 No 163	

14.6. Special precautions for user

No information available.

No

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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 28, Entry 40, Entry 75

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions
	under the Maternity Protection Directive (92/85/EEC) for expectant or
	nursing mothers.
Water hazard class (D):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Permeates easily through outer skin and causes poisoning.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50% LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H332	Calculation method
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Carc. 2; H351	Calculation method
STOT SE 3; H335	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

Highly flammable liquid and vapour.
Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Harmful in contact with skin.

according to UK REACH Regulation



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H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The current version of this safety data sheet is available on our website www.enke-werk.de/en

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