LIQUID

Safety Data Sheet
Universal Primer 933

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Trade name:	Universal Primer 933
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: Street: Place: Tel: Telefax E-mail: Internet: Responsible department:	ENKE-Werk Johannes Enke GmbH & Co. KG Hamburger Str. 16 40221 Düsseldorf, Germany +49 (0) 211 / 30 40 74 +49 (0) 211 / 39 37 18 info@enke-werk.de www.enke-werk.de/en On weekdays between 7 a.m. and 4 p.m. +49 (0) 211 / 30 40 74
1.4	Emergency telephone number:	Poison Information Centre (24h): +49 (0) 551 / 19 240

SECTION 2: HAZARD IDENTIFICATION

2.1	Classification of the substance or mixture	
	Regulation (EC) No. 1272/2008	
	Hazard categories:	
	Flammable liquid:	Flam. Liq. 2
	Acute toxicity:	Acute Tox. 4
	Skin corrosion/irritation:	Skin Irrit. 2
	Serious eye damage/eye irritation	Eye Irrit. 2
	Specific target organ toxicity - single exposure:	STOT SE 3
	Specific target organ toxicity - single exposure:	STOT RE 2
	Aspiration hazard:	Asp. Tox. 1
	Hazardous to the aquatic environment	Aquatic Chronic
	Hazard Statements:	
	Highly flammable liquid and vapour.	
	May be fatal if swallowed and enters airway	
	Causes skin irritation.	
	Causes serious eye irritation.	
	Harmful if inhaled.	
	May cause respiratory irritation.	
	May cause damage to organs through prolonged or repeated exposure.	
	Harmful to aquatic life with long lasting effects.	
2.2	Label elements	
	Regulation (EC) No. 1272/2008	
	Hazard components for labelling	Xylene
		4-methylpentan-2-one, isobutyl methyl ketone
	Signal word:	Danger
	Pictograms:	
		

	Hazard statements	
	H225	Highly flammable liquid and vapour.
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H412	Harmful to aquatic life with long lasting effects.
	Precautionary statements	
	P261	Avoid breathing vapour.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/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			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
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 methyl ketone			10 - 30 %
	203-550-1	606-004-00-4		
	Flam. Liq. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3; H225 H332 H319 H335 EUH066			
64742-82-1	Hydrocarbons, C9 - C12, n- alkanes, 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.

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	Pick up mechanically 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 plenty of water. Do NOT induce vomiting. Aspiration hazard! Call a physician in any case!
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	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	Take up mechanically. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.
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.
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
		-	-		STEL (15 min)	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
108-10-1	4-methylpentan-2-one	4-methylpentan-2-one	20 µmol/L	urine	Post shift
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

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 DNEL, long-term	dermal	systemic	26 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	71 mg/m³
Consumer DNEL, 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.
	Protective and hygiene measures	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.
	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) 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 filter device: A2 - P2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties		
	Physical State	Liquid	
	Colour	transparent, light yellow	
	Odour	like: Solvent	
			Test Method
	pH-Value	not determined	
	Changes in the physical state		
	Melting point:	not determined	
	Initial boiling point and boiling range:	~ 80 °C	
	Flash point:	11 °C	DIN ISO 53213
	Flammability		
	Solid:	not applicable	
	Gas:	not applicable	
	Lower explosion limits:	0,6 vol. %	
	Upper explosion limits:	6,5 vol. %	
	Ignition temperature:	460 °C	
	Auto-ignition temperature		
	Solid:	not applicable	
	Gas:	not applicable	
	Decomposition temperature:	not determined	
	Oxidizing properties		
	Not oxidising.		
	Vapour pressure (at 55°C):	0,015 - 0,02 hPa	
	Density (at 20 °C):	~ 0,9 g/cm³	

	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:	not determined
	Viscosity / dynamic: (at 20 °C)	10 - 50 mPa·s
	Vapour density:	not determined
	Evaporation rate:	not determined
9.2	Other information	
	Solid content:	not determined

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Flammable, Ignition hazard.
10.2	Chemical stability	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 toxicological effects

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalative vapour) 14,84 mg/l; ATE (inhalative aerosol) 2,083 mg/l

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

	Irritation and corrosivity
	Causes skin irritation. Causes serious eye irritation.
	STOT-single exposure
	May cause respiratory irritation.
	STOT-repeated exposure
	May cause damage to organs through prolonged or repeated exposure.
	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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
108-10-1	4-methylpentan-2-one, isobutyl methyl ketone					
	Acute fish toxicity	LC50 505 - 540 mg/l	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- alkanes, 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	48 h	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 product has not been tested.
12.6	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

	Advice on disposal	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.
	Waste disposal number of waste from residues/unused products	080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste
	Waste disposal number of used product	080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste
	Contaminated packaging	Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/RID)		
14.1	UN 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:	5L
	Excepted quantity:	E2
	Transport category:	2
	Hazard No:	33
	Tunnel restriction code:	D/E
Inland waterways transport (ADN)		
14.1	UN 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:	5L
	Excepted quantity:	E2
Marine transport (IMDG)		
14.1	UN 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
	Marine pollutant:	No
	Special Provisions:	163
	Limited quantity:	5L
	Excepted quantity:	E2
	EmS:	F-E, S-E
14.5	Environmental hazards	
	ENVIRONMENTALLY HAZARDOUS:	no
14.6	Special precautions for user	No information available.
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	not applicable

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/ legislation specific for the substance or mixture	
	EU regulatory information	
	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 contaminating class (D):	2 - clearly water contaminating
	Skin resorption/Sensitisation:	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%

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.

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Moy Materials Ltd version prepared by	Martin Bidewell

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.