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

1.1. Product identifier

PU Resin 8812/30T

UFI: 6XRF-44VK-000H-1MKP

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

Use of the substance/mixture

Resins (prepolymers)

1.3. Details of the supplier of the safety data sheet

Company name: Kisling (Deutschland) GmbH
Street: Salzstraße 15
Place: D-74676 Niedernhall
Telephone: +49 7940 5096161
E-mail: info@kisling.com
Contact person: Isabel Winter Telephone: +49 7941 92054087
E-mail: info@kisling.com
Internet: www.kisling.com

1.4. Emergency telephone number:

24 hr. emergency phone number +1 872 5888271 (KAR)
Medicines & Poisons Info Office +356 2545 6508

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Eye Irrit. 2; H319
Repr. 2; H361fd

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Propylidynetrimethanol

Signal word: Warning

Pictograms:

Hazard statements

H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.

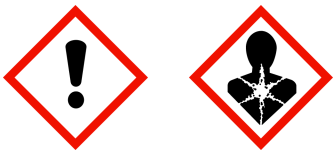
Precautionary statements

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



Hazard statements

H361fd

Precautionary statements

P201-P280-P308+P313

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
144-19-4	2,2,4-trimethylpentane-1,3-diol			15 - < 30 %
			01-2119941373-40	
	Eye Irrit. 2; H319			
115-84-4	2-butyl-2-ethylpropanediol			15 - < 30 %
	204-111-7		01-2119450133-52	
	Eye Irrit. 2; H319			
77-99-6	Propylidynetrimethanol			5 - < 15 %
	201-074-9		01-2119486799-10	
	Repr. 2; H361fd			

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		
144-19-4		2,2,4-trimethylpentane-1,3-diol	15 - < 30 %
	oral: LD50 = > 2000 mg/kg		
115-84-4	204-111-7	2-butyl-2-ethylpropanediol	15 - < 30 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2900 mg/kg		
77-99-6	201-074-9	Propylidynetrimethanol	5 - < 15 %
	dermal: LD50 = > 10000 mg/kg; oral: LD50 = ca. 14700 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

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

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

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

Additional information

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

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 to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

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.

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

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

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, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Resins (prepolymers)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
144-19-4	2,2,4-trimethylpentane-1,3-diol			
Worker DNEL, long-term		inhalation	systemic	6,61 mg/m³
Worker DNEL, long-term		dermal	systemic	7,03 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,6 mg/m³
Consumer DNEL, long-term		dermal	systemic	6 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	18 mg/kg bw/day
115-84-4	2-butyl-2-ethylpropanediol			
Worker DNEL, long-term		inhalation	systemic	5,3 mg/m³
Worker DNEL, long-term		dermal	systemic	1,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,3 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,75 mg/kg bw/day
77-99-6	Propylidynetrimethanol			
Worker DNEL, long-term		inhalation	systemic	3,3 mg/m³
Worker DNEL, long-term		dermal	systemic	0,94 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,58 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,34 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,34 mg/kg bw/day

PNEC values

CAS No	Name of agent	
Environmental compartment		Value
144-19-4	2,2,4-trimethylpentane-1,3-diol	
Freshwater		0,109 mg/l
Freshwater (intermittent releases)		1,091 mg/l
Marine water		0,011 mg/l
Freshwater sediment		0,903 mg/kg
Marine sediment		0,09 mg/kg
Micro-organisms in sewage treatment plants (STP)		20 mg/l
Soil		0,117 mg/kg
115-84-4	2-butyl-2-ethylpropanediol	
Freshwater		0,1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,01 mg/l
Micro-organisms in sewage treatment plants (STP)		6,5 mg/l

8.2. Exposure controls


Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless, transparent
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not applicable not applicable
Lower explosion limits:	not determined

Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
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:	not determined
Density (at 22 °C):	1,03 - 1,08 g/cm³
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined
Viscosity / dynamic: (at 22 °C)	1600 - 2000 mPa·s

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
144-19-4	2,2,4-trimethylpentane-1,3-diol				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2012)	OECD Guideline 425
115-84-4	2-butyl-2-ethylpropanediol				
	oral	LD50 2900 mg/kg	Rat	Study report (1988)	EU Method B.1
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1990)	OECD Guideline 402
77-99-6	Propylidynetrimethanol				
	oral	LD50 ca. 14700 mg/kg	Rat	Study report (1956)	Method: groups of 5 male rats were given
	dermal	LD50 > 10000 mg/kg	Rabbit	Study report (1956)	Groups of 4 albino rabbits were evaluate

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. Suspected of damaging the unborn child. (Propylidynetrimethanol)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
144-19-4	2,2,4-trimethylpentane-1,3-diol						
	Acute fish toxicity	LC50 mg/l	> 700	96 h	Lepomis macrochirus	Study report (1986)	other: Methods for Acute Toxicity Tests
	Acute algae toxicity	ErC50 mg/l	> 110,1	72 h	Raphidocelis subcapitata	Study report (2001)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 109,1	48 h	Daphnia magna	Study report (2002)	OECD Guideline 202
115-84-4	2-butyl-2-ethylpropanediol						
	Acute algae toxicity	ErC50	94 mg/l	72 h	Raphidocelis subcapitata	Study report (1995)	EU Method C.3
	Acute bacteria toxicity	(EC50 mg/l)	650	3 h	Activated sludge	Study report (1998)	OECD Guideline 209
77-99-6	Propylidynetrimethanol						
	Acute fish toxicity	LC50 mg/l	> 1000	96 h	Alburnus alburnus	Marine Pollution Bulletin, 14, 213-214 (	A static acute toxicity test was perform
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Raphidocelis subcapitata	Citation of an unavailable study report	other: OECD Guideline, not further speci
	Crustacea toxicity	NOEC mg/l	> 1000	21 d	Daphnia magna	Citation of an unavailable study report	other: OECD guideline, not further speci
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	3 h	activated sludge of a predominantly domestic sewag	Study report (2010)	EU Method C.11

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
144-19-4	2,2,4-trimethylpentane-1,3-diol			
	OECD 301A	99%	28	Pre-supplier/manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
144-19-4	2,2,4-trimethylpentane-1,3-diol	1,25
115-84-4	2-butyl-2-ethylpropanediol	2,2
77-99-6	Propylidynetrimethanol	-0,47

BCF

CAS No	Chemical name	BCF	Species	Source
77-99-6	Propylidynetrimethanol	< 1	Cyprinus carpio	Citation of an unava

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 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

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

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 - used product

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

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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 75

Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

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):	1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

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
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
Eye Irrit: Eye irritation
Repr: Reproductive toxicity

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

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Repr. 2; H361fd	Calculation method

Relevant H and EUH statements (number and full text)

H319 Causes serious eye irritation.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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