

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 1/13/2015 Revision date: 5/8/2018 Supersedes: 3/7/2018 Version: 6.3

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

1.1. Product identifier

Product form : Mixture

Trade name : RAPTOR LINER - BLACK
Product code : RLB/1, RLB/5, RLB/S1, RLB/S4

Product group : Coating

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Function or use category : Coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

U-POL LIMITED Denington Road, Wellingborough Northants. NN8 2QH - UK T +44 (0) 1933 230310

technical.department@u-pol.com - www.u-pol.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - +44 (0) 870 8200418 (24 hrs)

H317

H336

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225 Serious eye damage/eye irritation, Category H319 2

Skin sensitisation, Category 1
Specific target organ toxicity — Single

exposure, Category 3, Narcosis
Hazardous to the aquatic environment — H412

Chronic Hazard, Category 3

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects. May cause cancer. May cause genetic defects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

nor.

Signal word (CLP) : Danger

Hazardous ingredients : acetone; n-butyl acetate; reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-

hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-

butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-

hydroxyphenyl)propionyloxypoly(oxyethylene); reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; solvent naphtha

(petroleum), light aromatic

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

H412 - Harmful to aquatic life with long lasting effects.

5/8/2018 EN (English) SDS Ref. (EU): RLB 1/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P261 - Avoid breathing spray, vapours, fume. P264 - Wash hands thoroughly after handling.

P280 - Wear face protection, protective clothing, protective gloves. P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2 (EC Index-No.) 606-001-00-8 (REACH-no) 01-2119471330-49	10 - 20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
2-methoxy-1-methylethyl acetate substance with a Community workplace exposure limit	(CAS-No.) 108-65-6 (EC-No.) 203-603-9 (EC Index-No.) 607-195-00-7	3 - 10	Flam. Liq. 3, H226
Reaction Mixture of Ethylbenzene, m-xylene and p-xylene	(EC-No.) 905-562-9	3 - 10	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
n-butyl acetate substance with a Community workplace exposure limit	(CAS-No.) 123-86-4 (EC-No.) 204-658-1 (EC Index-No.) 607-025-00-1	3 - 5	Flam. Liq. 3, H226 STOT SE 3, H336
xylene (Note C)	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	1 - 2.5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315
reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	(EC-No.) 400-830-7 (EC Index-No.) 607-176-00-3	0.3 - 1	Skin Sens. 1, H317 Aquatic Chronic 2, H411
reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	(CAS-No.) 1065336-91-5 (EC-No.) 915-687-0 (REACH-no) 01-2119491304-40	0.1 - 1	Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or

rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : May cause drowsiness or dizziness.

5/8/2018 EN (English) SDS Ref. (EU): RLB 2/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Symptoms/effects after skin contact : May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Eye irritation.

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 : Dry sand. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Hazardous decomposition products in case of : Toxic fumes may be released.

fire

Protection during firefighting

5.3. Advice for firefighters

: Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Protective clothing. Gloves. Safety glasses.

Emergency procedures : Ventilate spillage area. Do not breathe vapours. No open flames, no sparks, and no smoking.

Avoid breathing vapours, fume, spray. Avoid contact with skin and eyes. Only qualified

personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain leaking substance. Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. This material and its container must be disposed of

in a safe way, and as per local legislation. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep away from Heat and ignition sources. No smoking.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapours, fume, spray. Avoid contact with skin and eyes. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned

regularly.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Storage temperature : < 25 °C

Storage area : Store in well ventilated area.

Special rules on packaging : Keep only in original container.

5/8/2018 EN (English) SDS Ref. (EU): RLB 3/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

xylene (1330-20-7)		
EU	Local name	Xylene, mixed isomers, pure
EU	IOELV TWA (mg/m³)	221 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	442 mg/m³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom	Local name	Xylene, o-,m-,p- or mixed isomers
United Kingdom	WEL TWA (mg/m³)	220 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	441 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2)
United Kingdom	Regulatory reference	EH40. HSE
acetone (67-64-1)		
EU	Local name	Acetone
EU	IOELV TWA (mg/m³)	1210 mg/m³
EU	IOELV TWA (ppm)	500 ppm
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom	Local name	Acetone
United Kingdom	WEL TWA (mg/m³)	1210 mg/m³
United Kingdom	WEL TWA (ppm)	500 ppm
United Kingdom	WEL STEL (mg/m³)	3620 mg/m³
United Kingdom	WEL STEL (ppm)	1500 ppm
United Kingdom	Regulatory reference	EH40. HSE
n-butyl acetate (123-86	-4)	
EU	Local name	n-butyl acetate
EU	Notes	(Ongoing)
EU	Regulatory reference	SCOEL Recommendations
United Kingdom	Local name	Butyl acetate
United Kingdom	WEL TWA (mg/m³)	724 mg/m³
United Kingdom	WEL TWA (ppm)	150 ppm
United Kingdom	WEL STEL (mg/m³)	966 mg/m³
United Kingdom	WEL STEL (ppm)	200 ppm
United Kingdom	Regulatory reference	EH40. HSE
2-methoxy-1-methyleth	ryl acetate (108-65-6)	
EU	Local name	2-Methoxy-1-methylethylacetate
EU	IOELV TWA (mg/m³)	275 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	550 mg/m ³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom	Local name	1-Methoxypropyl acetate
United Kingdom	WEL TWA (mg/m³)	274 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	548 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
5/8/2018	EN (English)	SDS Ref. (EU): RLB 4/12

5/8/2018 EN (English) SDS Ref. (EU): RLB 4/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2-methoxy-1-methylethyl acetate (108-65-6)		
United Kingdom	Regulatory reference	EH40. HSE

RAPTOR LINER - BLACK	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	< mg/kg bodyweight/day

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Protective clothing. Safety glasses. Gas mask.

Materials for protective clothing:

Impermeable clothing

Hand protection:

Protective gloves

Eye protection:

Chemical goggles or face shield. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Air-fed respiratory protective equipment should be worn when this product is sprayed. [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):









Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Viscous. Liquid.

Colour : Black.
Odour : aromatic.

Odour threshold : No data available pH : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available

Boiling point : > 35 °C Flash point : < 0 °C

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 1.1 - 1.14 g/cm³

Solubility : insoluble in water. soluble in most organic solvents.

Log Pow : No data available

5/8/2018 EN (English) SDS Ref. (EU): RLB 5/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : 426 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value)
acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value)
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value)
LC50 inhalation rat (mg/l)	76 mg/l (Other, 4 h, Rat, Female, Experimental value)
n-butyl acetate (123-86-4)	
LD50 oral rat	10760 - 12789 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male/female, Experimental value)
LD50 dermal rabbit	14112 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male/female, Experimental value)
2-methoxy-1-methylethyl acetate (108-65-	6)
LD50 oral rat	6190 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male/female, Experimental value)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified

STOT-single exposure : May cause drowsiness or dizziness.

: Not classified

: Not classified

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Carcinogenicity

Reproductive toxicity

5/8/2018 EN (English) SDS Ref. (EU): RLB 6/12

SECTION 12: Ecological information

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 12: Ecological Informati 12.1. Toxicity	
Ecology - general	: Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
xylene (1330-20-7)	
LC50 fish 1	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across)
EC50 Daphnia 1	3.82 mg/l (48 h, Daphnia magna, Flow-through system, Fresh water, Read-across)
acetone (67-64-1)	
LC50 fish 1	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value)
EC50 96h algae (1)	> 7000 mg/l (Selenastrum capricornutum, Static system, Fresh water, Experimental value)
n-butyl acetate (123-86-4)	
LC50 fish 1	18 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	44 mg/l (48 h, Daphnia sp., Static system, Fresh water, Experimental value)
EC50 72h algae (1)	674.7 mg/l (Desmodesmus subspicatus, Static system, Fresh water, Experimental value)
benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphydroxyphenyl)propionyloxypoly(oxyeth LC50 fish 1	2.8 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 Daphnia 1 ErC50 (algae)	4 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value) > 100 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimenta
ETC50 (algae)	value)
2-methoxy-1-methylethyl acetate (108-65	5-6)
LC50 fish 1	100 - 180 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	373 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 96h algae (1)	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Stat system, Fresh water, Experimental value)
2.2. Persistence and degradability	
xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
acetone (67-64-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O₂/g substance
Chemical oxygen demand (COD)	1.92 g O₂/g substance
ThOD	2.2 g O ₂ /g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)
n-butyl acetate (123-86-4)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.21 g O₂/g substance
BOD (% of ThOD)	0.46
2-methoxy-1-methylethyl acetate (108-65	5-6)
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
2.3. Bioaccumulative potential	
xylene (1330-20-7)	
BCF fish 1	7 - 26 (8 week(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
Log Pow	3.2 (Conclusion by analogy, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
acetone (67-64-1)	
BCF fish 1	0.69 (Pisces)
/8/2018	EN (English) SDS Ref. (EU): RLB 7

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

acetone (67-64-1)	
BCF other aquatic organisms 1	3 (BCFWIN, Calculated value)
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
n-butyl acetate (123-86-4)	
BCF fish 1	15.3 (Calculated value)
Log Pow	2.3 (Test data, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
reaction mass of α-3-(3-(2H-benzotriaz benzotriazol-2-yl)-5-tert-butyl-4-hydrox hydroxyphenyl)propionyloxypoly(oxye	ol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H- yphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4- thylene)
BCF fish 1	2658 - 3430 (502 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
Log Pow	4.6 (Experimental value, Equivalent or similar to OECD 117, 25 °C)
2-methoxy-1-methylethyl acetate (108-	ò5-6)
Log Pow	1.2 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
xylene (1330-20-7)	
Surface tension	28.01 - 29.76 mN/m (25 °C)
Ecology - soil	No (test)data on mobility of the substance available. May be harmful to plant growth, blooming and fruit formation.
acetone (67-64-1)	
Surface tension	0.0237 N/m
Ecology - soil	No (test)data on mobility of the substance available.
n-butyl acetate (123-86-4)	
Surface tension	0.0163 N/m (20 °C)
Log Koc	1.268 - 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.
2-methoxy-1-methylethyl acetate (108-	ò5-6)
Surface tension	29.4 mN/m (20 °C, 100 vol %)
Log Koc	0.264 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.
12.5. Results of PBT and vPvB asset	ssment
Component	
acetone (67-64-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
n-hutyl acetate (123-86-4)	This substance/mixture does not meet the PRT criteria of REACH regulation, annex XIII

Component	
acetone (67-64-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
n-butyl acetate (123-86-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-methoxy-1-methylethyl acetate (108-65-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR		IMDG	IATA	ADN	RID
14.1.	UN number				
1263		1263	1263	1263	1263
14.2.	2. UN proper shipping name				
PAINT		PAINT	Paint	PAINT	PAINT

5/8/2018 EN (English) SDS Ref. (EU): RLB 8/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	IATA	ADN	RID
Transport document descr	iption			
UN 1263 PAINT, 3, II, (D/E)	UN 1263 PAINT, 3, II	UN 1263 Paint, 3, II	UN 1263 PAINT, 3, II	UN 1263 PAINT, 3, II
14.3. Transport hazard	class(es)			
3	3	3	3	3
3	3	3	3	3
14.4. Packing group				
II	II	II	l II	ll II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
	No supplementary information available			

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

Special provisions (ADR) : 163, 367, 640D, 650

Limited quantities (ADR) : 5l Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions : T4

(ADR)

Portable tank and bulk container special

provisions (ADR)

: TP1, TP8, TP28

Tank code (ADR) : LGBF

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation : S2, S20

(ADR)

Hazard identification number (Kemler No.) : 33

Orange plates

33 1263

Tunnel restriction code (ADR) : D/E EAC code : •3YE

- Transport by sea

Special provisions (IMDG) : 163, 367
Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP8, TP28

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : B

Properties and observations (IMDG) : Miscibility with water depends upon the composition.

5/8/2018 EN (English) SDS Ref. (EU): RLB 9/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

- Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) : 60L

: A3, A72, A192 Special provisions (IATA)

ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : F1

: 163, 367, 640C, 650 Special provisions (ADN)

Limited quantities (ADN) : 5 L Excepted quantities (ADN) : E2 Equipment required (ADN) : PP, EX, A Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : F1

: 163, 367, 640C, 650 Special provisions (RID)

Limited quantities (RID) : 5L Excepted quantities (RID) : E2 Packing instructions (RID) : P001 Special packing provisions (RID) : PP1 Mixed packing provisions (RID) : MP19 : T4

Portable tank and bulk container instructions

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : L1.5BN

Transport category (RID) : 2 Colis express (express parcels) (RID) : CE7 Hazard identification number (RID) : 33

Transport in bulk according to Annex II of Marpol and the IBC Code 14.7.

Not applicable

SECTION 15: Regulatory information

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

: TP1, TP8, TP28

15.1.1. **EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

RAPTOR LINER - BLACK - acetone - n-butyl acetate - xylene - reaction mass of α-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4-

hydroxyphenyl)propionyl-ω-

hydroxypoly(oxyethylene) and α-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl-ω-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4-

hydroxyphenyl)propionyloxypoly(oxyethylene) -2-methoxy-1-methylethyl acetate

3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

RAPTOR LINER - BLACK - acetone - n-butyl acetate - xylene - 2-methoxy-1-methylethyl acetate - Reaction Mixture of Ethylbenzene, mxylene and p-xylene

5/8/2018 EN (English) SDS Ref. (EU): RLB 10/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	RAPTOR LINER - BLACK - acetone - xylene - reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) - reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - Reaction Mixture of Ethylbenzene, m-xylene and p-xylene
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	RAPTOR LINER - BLACK - reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) - reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	RAPTOR LINER - BLACK - acetone - n-butyl acetate - xylene - 2-methoxy-1-methylethyl acetate

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 426 g/l

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

5/8/2018 EN (English) SDS Ref. (EU): RLB 11/12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

SDS EU (REACH Annex II)

For professional use only.

For professional use only.
The information contained within this Safety Data Sheet (SDS) is believed to be correct as of the date issued however it is subject to change from time to time. It does not purport to be all inclusive or exhaustive and shall only be used as a guide. U-POL makes no warranties, expressed or implied, including but not limited to, any implied warranty of fitness for a given purpose or usage. It is the Buyers responsibility to ensure the suitability of the products for their own use and to check the information is up to date. U-POL cannot be held responsible for the suitability of use for any of its products, considering the wide range of factors such as application, substrates and handling methods. Since these conditions of use are outside of our control, the company shall not be held liable for any damage resulting from handling or from contact with the product detailed. Moreover, addition of reducers, hardeners or other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. U-POL data sheets are available via the U-POL website at WWW.U-POL.COM.

5/8/2018 EN (English) SDS Ref. (EU): RLB 12/12