Safety Data Sheet

Thinner VLB59**

Replaces date: 08-10-2015

Revision date: 18-10-2016
Version: 2.0.0

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

1.1. Product identifier

Trade name: Thinner VLB59**

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

Recommended uses: Thinning of paint and lacquer.

Inadvisable uses: The product is recommended for only the above described uses.

1.3. Details of the supplier of the safety data sheet

Supplier

Company:	The Vapormatic Co. Ltd.
Address:	Kestrel Way, Sowton Industrial Estate
Post code:	EX2 7NB EXETER
Country:	UNITED KINGDOM
E-mail:	info@vapormatic.com
Phone:	+44 (0)1392 435461
Fax:	+44 (0)1392 438445
Homepage:	www.vapormatic.com

1.4. Emergency Telephone Number

GB: +44 1215074123 (Advice and guidance) (Around the clock)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Flam. Liq. 2;H225 Asp. Tox. 1;H304 Acute Tox. 4;H312/332 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H336

Most serious harmful effects: Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

2.2. Label elements

Pictograms

Signal word: Danger

Contains

Substance: n-butyl acetate; acetone; Xylene; Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light

H-phrases

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312/332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

P-phrases

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301/330/331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304/340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337/313	If eye irritation persists: Get medical advice/attention.
P403/233	Store in a well-ventilated place. Keep container tightly closed.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.

Supplemental information

EUH066	Repeated exposure may cause skin dryness or cracking.

Only self-contained breathing apparatus must be used as the product contains volatile liquids the vapors of which are not detained by carbon filters.

2.3. Other hazards

The product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS number	EC No	REACH Reg. No.	Concentration	Notes	CLP-classification
acetone	67-64-1	200-662-2	01-2119471330-49	10 - 25%		Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336
Xylene	1330-20-7	215-535-7	01-2119488216-32	10 - 25%		Flam. Liq. 3;H226 Acute Tox. 4;H312 Skin Irrit. 2;H315 Acute Tox. 4;H332

n-butyl acetate	123-86-4	204-658-1		10 - 25%		Flam. Liq. 3;H226 STOT SE 3;H336
propan-2-ol	67-63-0	200-661-7	01-2119457558-25	10 - 25%		Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336
Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light	64742-49-0	265-151-9		10 - 20%		Flam. Liq. 2;H225 Asp. Tox. 1;H304 STOT SE 3;H336 Aquatic Chronic 3;H412
ethylbenzene	100-41-4	202-849-4		2.5 - 10%		Flam. Liq. 2;H225 Asp. Tox. 1;H304 Acute Tox. 4;H332 STOT RE 2;H373

Please see section 16 for the full text of H-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: If patient feels unwell move to fresh air and keep under surveillance. If the victim is unconscious, ascertain whether the victim is breathing. If breathing has stopped, apply artificial respiration. If the victim is unconscious but breathing, place in the recovery position and keep warm with blankets. Call for medical attention or ambulance.

Ingestion: Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn´t enter the lungs. Get medical attention immediately!

Skin contact: Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Do not use solvents.

Eye contact: Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice.

General: If in doubt, seek medical advice. Also see para. 1

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

Pain in the eyes, redness, tears, swollen eyelids, itching Headache, dizziness, drowsiness and nausea.

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

By ingestion the material can give chemical lung inflammation, which needs treatment.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Fire can be extinguished with carbon dioxide, powder, foam or water spray.

Unsuitable extinguishing media: Do not use a direct water jet that could spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid inhaling of waste gases. Combustion will generate harmful gases, as combustion residues and carbon monoxide.

5.3. Advice for fire-fighters

Cool closed containers with water. Fire will produce a thick black smoke. Products of combustion are harmful and respiratory protection is required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid inhalation of vapours. Remove all ignition sources and ensure sufficient ventilation.

For emergency responders: Use nitrile protection gloves and self-contained breathing apparatus.

6.2. Environmental precautions

Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3. Methods and material for containment and cleaning up

Prevent major quantities of spillage from being discharged into the sewage system or water by banking the spillage with sand or the like and collecting it. Clean the contaminated area with a suitable cleaning agent, but do not use solvent.

6.4. Reference to other sections

Also see item 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

The product may be charged electrostatically. Always use underground wire when transferring from one container to another. Personnel should wear antistatic shoes and clothing. Floors should be conductive. Do not use tools which may produce sparks. Avoid contact with eyes and skin. Avoid inhaling vapors and spray mists. Vapors may form explosive mixtures with air. Prevent the formation of flammable or explosive mixtures. Do not use this material near naked flames or any other ignition source. Electrical installations must be protected according to regulations.

7.2. Conditions for safe storage, including any incompatibilities

The product must be kept away from children. Store in a tightly closed container and in accordance with the current regulations in a dry and well-ventilated place away from food. Keep away from ignition sources, oxidizing agents and strong acidic and basic substances. No smoking and use of open fire. No admittance to unauthorized persons. Opened containers must be carefully closed and stored upright to prevent any leakage.

7.3. Specific end use(s)

Applications is mentioned in item 1.2.

Other Information: Smoking and the consumption of food and drink are not permitted in work rooms. Personal protective equipment: Refer to section 8.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m3	Comment	Remarks
propan-2-ol	8h	400	999		
propan-2-ol	15m	500	1250		
n-butyl acetate	8h	150	724		
n-butyl acetate	15m	200	966		
acetone	8h	500	1210		
acetone	15m	1500	3620		

Xylene	8h	50	220		BMGV, Sk
Xylene	15m	100	441		BMGV, Sk
ethylbenzene	8h	100	441		Sk
ethylbenzene	15m	125	552		Sk

BMGV = Biological monitoring may be appropriate and Biological Monitoring Guidance Value is listed in Table 3 (Occupational Exposure Limits)

Sk = Can be absorbed throuh skin

Legal basis: EH40/2005 Workplace exposure limits incl. supplement from October 2007.

PNEC

propan-2-ol

Exposure	Value	Assessment Factor	Extrapolation Method	Note
Freshwater	140.9 mg/l			
Marine water	140.9 mg/l			
Soil	28 mg/kg			

n-butyl acetate

Exposure	Value	Assessment Factor	Extrapolation Method	Note
Freshwater - sediment	0,981 mg/kg			
Marine water - sediment	0,0981 mg/kg			
Soil	0,0903 mg/kg			
Marine water	0,018 mg/l			
Freshwater	0,18 mg/l			

acetone

Exposure	Value	Assessment Factor	Extrapolation Method	Note
Freshwater	10,6 mg/l			
Soil	33,3 mg/l			
Marine water	1,06 mg/l			

Xylene

Exposure	Value	Assessment Factor	Extrapolation Method	Note
Freshwater	0,327 mg/l			
Marine water	0,327 mg/l			
Freshwater - sediment	12,46 mg/kg			
Marine water - sediment	12,46 mg/kg			
Soil	2,31 mg/kg			

ethylbenzene

Exposure	Value	Assessment Factor	Extrapolation Method	Note
Freshwater	0,1 mg/l			
Marine water	0,01 mg/l			
Freshwater - sediment	13,7 mg/kg			
Soil	2,68 mg/kg			

DNEL - workers

propan-2-ol

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal	888 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	500 mg/m3	Long-term exposure		Systemic effects	

n-butyl acetate

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note

Inhalation	960 mg/m3	Acute / short-term exposure		Local effects	
Inhalation	480 mg/m3	Long-term exposure		Systemic effects	
Inhalation	960 mg/m3	Acute / short-term exposure		Systemic effects	

acetone					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation	1210 mg/m3	Long-term exposure			
Inhalation	2420 mg/m3	Acute / short-term exposure			
Dermal	186 mg/kg	Long-term exposure			

Xylene					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation	289 mg/m3	Acute / short-term exposure		Systemic effects	
Inhalation	289 mg/m3	Acute / short-term exposure		Local effects	
Dermal	180 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	77 mg/m3	Long-term exposure		Systemic effects	

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal	773 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	2035 mg/m3	Long-term exposure		Systemic effects	
Oral	699 mg/kg bw/day	Long-term exposure		Systemic effects	

ethylbenzene					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal	180 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	77 mg/m3	Long-term exposure		Systemic effects	
Inhalation	293 mg/m3	Acute / short-term exposure		Local effects	

DNEL - general population

propan-2-ol					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal	319 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	89 mg/m3	Long-term exposure		Systemic effects	
Oral	26 mg/kg	Long-term exposure		Systemic effects	

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal	699 mg/kg bw/day	Long-term exposure		Systemic effects	
Inhalation	608 mg/m3	Long-term exposure		Systemic effects	

Biological threshold values: See above.

Other Information: See above.

8.2. Exposure controls

Appropriate engineering controls: All work must be planned with a view to limit the breathing of fumes and the exposure to the skin. Work under effective process ventilation (e.g. local exhaust ventilation). If this is not possible, use respiratory protection.

Personal protective equipment, eye/face protection: Use suitable protective goggles or full face mask for protection against splashes.

Personal protective equipment, skin protection: If possible, wear special work clothes. When spraying wear coveralls.

Personal protective equipment, hand protection: Follow the glove manufacturer's recommendations on use and replacement. Use nitrile protection gloves. A 15-mil thickness glove provides a one-hour breakthrough-time.

Personal protective equipment, respiratory protection: Use compressed-air full face mask.

Environmental exposure controls: It must be ensured that local regulations for discharge are met.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Liquid
Colour	Colourless.
Odour	Odour of organic solvent.
Solubility	Soluble in: Organic solvents.
Explosive properties	See explosive limits
Oxidising properties	Not applicable.

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)	No data	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flash Point	~ -17 °C	
Evaporation rate	No data	
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	0.70 - 13 vol%	
Vapour pressure	No data	
Vapour density	No data	
Relative density	No data	
Partition coefficient n-octonol/water	No data	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
Viscosity	No data	
Odour threshold	No data	

9.2 Other information

Parameter	Value/unit	Remarks
Density	0.81 g/ml	
Fire class	I-1	
Weight % organic solvents	100	
VOC	810	

Other Information: Solubility in water: Insoluble in water. Fat solubility: irrelevant

SECTION 10: Stability and reactivity

10.1. Reactivity

See below.

10.2. Chemical stability

Stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Ignitable at temperatures above the flash point. The fumes can ignite by e.g. a spark, a warm surface or a glow. The fumes can mix to explosive mixtures with air. At room temperature the fumes are more heavily than air and can spread along the floor.

10.4. Conditions to avoid

Stable at normal temperature. When exposed to high temperatures, toxic decomposition products may be formed.

10.5. Incompatible materials

To prevent heat-generating reactions, keep the product away from oxidizing agents and strong acidic and basic substances.

10.6. Hazardous decomposition products

carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

propan-2-ol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		5840mg/kg			

n-butyl acetate

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		4700mg/kg			

acetone

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		5800 mg/kg		OECD 401	

Xylene

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000mg/kg			

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 5000mg/kg			

Aspiration during vomiting or ingestion may cause chemical pneumonia. Ingestion of large quantities may cause gastrointestinal disorders.

Acute toxicity - dermal

propan-2-ol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		13900mg/kg			

acetone

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 15800mg/kg			

Xylene

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		3200 mg/kg			

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		> 2800ppm			

Organic solvents may be absorbed through skin. Organic solvents have a degreasing effect on the skin.

Acute toxicity - inhalation

propan-2-ol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	6 h	> 25000mg/m3			

acetone

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	4 h	76 mg/l			

Xylene

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	4 h	21.7 mg/l			

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated light

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	4 h	> 23.3mg/l			

Protracted inhalation in high concentrations may cause permanent damage to the central nervous system. Inhalation of vapors may cause symptoms of poisoning such as memory and concentration difficulties, abnormal tiredness, irritability and, in extreme cases, unconsciousness.

Skin corrosion/irritation: Prolonged or repeated skin contact will degrease skin and may cause irritation.

Serious eye damage/eye irritation: Splashing into eyes may cause smarting/irritation.

Germ cell mutagenicity: Would not be expected germ cell mutagen

Carcinogenic properties: No data.

Reproductive toxicity: Would not be expected to be a reproductive toxicant.

Single STOT exposure: May cause drowsiness or dizziness.

Repeated STOT exposure: No data

Aspiration hazard: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

propan-2-ol

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Acute fish	Pimephales promelas	96 h	LC50	9640mg/l			
Acute Daphnia	Daphnia magna	24 h	LC50	9714mg/m3			
Acute algae		8 d	LOEC	1000mg/l			

n-butyl acetate

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Acute algae		72 h	EC50	6477mg/l			
Acute daphnia	Daphnia magna	48 h	EC50	44mg/l			

acetone

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Acute daphnia	Daphnia magna	48 h	EC50	8800 mg/l			
Acute fish	Onchorhynchus mykiss	96 h	LC50	5540 mg/l			

Xylene

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Acute algae	Pseudokirchneriella subcapitata	72 h	EC50	2.2mg/l		OECD 201	
Acute Daphnia	Daphnia magna	24 h	IC50	1mg/l		OECD 202	
Acute fish	Oncorhynchus mykiss	96 h	LC50	2.6mg/l		OECD 203	

ethylbenzene

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Acute daphnia	Daphnia magna	48 h	EC50	290mg/l			
Acute fish	Cyprinodon variegatus	96 h	LC50	88mg/l			

12.2. Persistence and degradability

propan-2-ol

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
		5 d		53%			

n-butyl acetate

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
		28 d	BOD	98%		BOD:ThOD	

No information available

12.3. Bioaccumulative potential

No information available

12.4. Mobility in soil

The product is insoluble in water and will spread out on the surface.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

No information available

Other Information

Do not dispose of this product in drains, watercourses, or on the ground. This product is classified as hazardous to the environment according to the calculation method. Please see par. 2 and 3 for further information.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid discharge to drain or surface water.

Product residues are classified as chemical waste. Avoid unnecessary release to the environment.

Category of waste: Waste-code: 08 01 11

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN-No.:	1263	**14.4. Packing group:**	II
14.2. UN proper shipping name:	PAINT RELATED MATERIAL	**14.5. Environmental hazards:**	
14.3. Transport hazard class(es):	3		
Hazard label(s):	3		
Hazard identification number:	33	**Tunnel restriction code:**	D/E
Other Information:			

Inland water ways transport (ADN)

14.1. UN-No.:	1263	**14.4. Packing group:**	II
14.2. UN proper shipping name:	PAINT RELATED MATERIAL	**14.5. Environmental hazards:**	
14.3. Transport hazard class(es):	3		
Hazard label(s):	3		
Environmentally hazardous in tank vessels:		**Other Information:**	

Sea transport (IMDG)

14.1. UN-No.:	1263	**14.4. Packing group:**	II
14.2. UN proper shipping name:	PAINT RELATED MATERIAL	**14.5. Environmental hazards:**	
14.3. Transport hazard class(es):	3	**Environmental Hazardous Substance Name(s):**	

Hazard label(s):	3		
EmS:	F-E, S-E	**IMDG Code segregation group:**	- None -
Other Information:			

Air transport (ICAO-TI / IATA-DGR)

14.1. UN-No.:	1263	**14.4. Packing group:**	II
14.2. UN proper shipping name:	PAINT RELATED MATERIAL	**14.5. Environmental hazards:**	
14.3. Transport hazard class(es):	3		
Hazard label(s):	3	**Other Information:**	

14.6. Special precautions for user

Irrelevant.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Irrelevant.

SECTION 15: Regulatory information

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

Special Provisions:

15.2. Chemical Safety Assessment

Other Information: Chemical safety assessment has not been performed.

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.0.0	08-10-2015	GK	
2.0.0	18-10-2016	GK	11, 12, 13

Abbreviations: DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration.

References to literature and data sources: REACH: REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals. DPD: Directive of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations. CLP: REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures.

Other Information: The information in this Material Safety Data Sheet is based upon our knowledge and on European Union legislation. The user's working conditions are outside our control. It is the responsibility of the users to fulfil the requirements set by National Legislation. The information is no guarantee of the properties of the product. The Material Safety Data Sheet may only be reproduced with the permission of the manufacturer.

Training advice: The instructions in this Material Safety Data Sheet are given on the assumption that the product is used as stated in item 1. Restrictions of use and special training requirements must also be complied with. The information in this Material Safety Data Sheet should be regarded as a description of the safety issues concerning the product.

List of relevant H-statements

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.
H312/332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Document language: GB