



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

1.1. Product identifier

Product Name Spectrum Routeline Lead-Free

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

Identified Uses Restricted to industrial and professional application only.

1.3. Details of the supplier of the safety data sheet

Supplier Meon Ltd.
Railside
Northharbour Spur
Portsmouth
PO6 3TU

+44 (0) 23 9220 0606
mail@meonuk.com

1.4. Emergency Telephone Number

Emergency telephone +44 (0) 808 118 1922

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008, GB (CLP)

Flammable Liquids, Category 2	H225 - Highly flammable liquid and vapour.
Skin Irritation, Category 2	H315 - Causes skin irritation.
Specific Target Organ Toxicity, Single Exposure, Category 3	H336 - May cause drowsiness or dizziness.
Reproductive Toxicity, Category 2	H361d - Suspected of damaging the unborn child.
Specific Target Organ Toxicity, Repeated Exposure, Category 2	H373 - May cause damage to organs through prolonged or repeated exposure. <Blood System>
Carcinogenic	
Acute Toxicity, Category 4	H350 - May cause cancer.
Specific Target Organ, Category 3, Single Exposure	H312 - Harmful in contact with skin. H336 - May cause drowsiness or dizziness.
Specific Target Organ, Category 1, Repeated Exposure	H370 - Causes damage to organs. <Upper Respiratory Tract>. H318 - Causes serious eye damage. H317 - May cause an allergic skin reaction.

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2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008, (CLP), GB (CLP)

Hazard pictograms



Signal word

Danger

Hazard statement(s)

H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H361d - Suspected of damaging the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H350 - May cause cancer.
H312 - Harmful in contact with skin.
H336 - May cause drowsiness or dizziness.
H370 - Causes damage to organs.
H318 - Causes serious eye damage.
H317 - May cause an allergic skin reaction.

Precautionary statement(s)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust, fume, gas, mist, vapours or spray.
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 - IF exposed or concerned: Get medical advice or attention.
P403+P235 - Store in a well-ventilated place. Keep cool.

Supplemental hazard information None.

2.3. Other hazards

Results of PBT and vPvB assessment

PBT Not applicable.
vPvB Not applicable.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substances Not applicable.

3.2. Mixtures

Description of the mixture Mixture of resins, solvents, pigments and additives.

Hazardous components

Chemical name	CAS No.	EC No.	REACH Registration No.	Classification	% [weight]
toluene	108-88-3	203-625-9	01-2119471310-51	H225, H304, H315, H336, H361d, H373 GHS02 GHS08 GHS07 Dgr	25 - 50
xylene	1330-20-7	215-535-7	01-2119488216-32	H226, H304, H312, H315, H319, H332, H335, H373 GHS02 GHS07 Wng	2.5 - 10
2-butanone oxime	96-29-7	202-496-6	01-2119539477-28	H350 H312 H301 H336 H370 (upper respiratory tract) H373 (blood system) H315 H318 H317	0.1 1.0

For the full text of the Hazard Statements mentioned in this Section, see Section 16.

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SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

General notes	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.
If inhaled	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
If swallowed	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest.
In case of skin contact	Do NOT induce vomiting. Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
In case of eye contact	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Self-protection of the first aider	None.

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

None.

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

None.

SECTION 5: Firefighting measures

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Suitable extinguishing media	Alcohol resistant foam, CO ₂ , powders and water spray/mist.
Unsuitable extinguishing media	Water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.
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5.3. Advice for firefighters

Advice for firefighters	Cool closed containers exposed to fire with water. Do not allow run-off from firefighting to enter drains or watercourses.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.
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6.2. Environmental precautions

Environmental precautions	Do not allow to enter drains or watercourses.
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If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain and collect spillage with non-combustible absorbent materials, e.g., sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see Section 13).
Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Reference to other sections None.

SECTION 7: Handling and storage

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions on safe handling

Advice on safe handling Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
Electrical equipment should be protected to the appropriate standard.
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
Operators should wear anti-static footwear and clothing and floors should be of the conducting type.
Isolate from sources of heat, sparks and open flame.
No sparking tools should be used.
Avoid skin and eye contact.
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture.
Avoid inhalation of dust from sanding.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or watercourses.

Advice on protection against fire and explosion Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations, 2002, (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR.

Notes on joint storage Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Additional information on storage conditions Observe label precautions.
Store between 5 °C and 25 °C in a dry, well-ventilated place away from sources of heat and direct sunlight.
Keep container tightly closed.
Keep away from sources of ignition.
No smoking.
Prevent unauthorised access.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
The principles contained in the HSE guidance note, Chemical Warehousing: The Storage of Packaged Dangerous Substances, should be observed when storing this product.

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7.3. Specific end use(s)

Specific end use(s) None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limits for occupational exposure and/or biological limit values.

Chemical name	Physical state	LTEL - 8hr TWA		STEL - 15min		Notes
		ppm	mg/m ³	ppm	mg/m ³	
toluene		50	191	100	384	Sk
xylene		50	220	100	441	Sk, BMGV
2-butanone oxime		3	10	10	33	NAOSH(Ire)

LTEL - Long Term Exposure Limit, STEL - Short Term Exposure Limit, TWA - Time-Weighted Average.

ppm - parts per million by volume, mg/m³ - milligrams per cubic metre.

BMGV - Biological Monitoring Guidance Values are given in Table 2 of EH40/2005 Workplace exposure limits.

Carc - Capable of causing cancer and/or heritable genetic damage.

Sen - Capable of causing occupational asthma.

Sk - Can be absorbed through the skin. Dermal absorption may lead to systemic toxicity.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

If these are not sufficient to maintain concentrations of particles and solvent vapour below the OEL, suitable respiratory protection must be worn.

Eye protection

Use safety eyewear designed to protect against splash of liquids.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling, use Polyvinyl Alcohol (PVA) or Viton Rubber (Fluor-Rubber).

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Skin protection

Personnel should wear anti-static clothing made of natural fiber or of high temperature resistant synthetic fiber.

Respiratory protection

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Environmental exposure controls

Do not allow to enter drains or watercourses.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance - Physical state	Viscous liquid.
- Colour	Various.
Odour	Aromatic hydrocarbon.
Odour threshold - Lower	Not determined.
- Higher	Not determined.
pH	Not determined.
Melting point/freezing point (°C)	> -95
Initial boiling point and range (°C)	110 - 140
Flash point (°C)	4
Evaporation rate	Not determined.
Flammability/explosive limits	
Lower (%)	Not determined.
Higher (%)	Not determined.
Vapour pressure	> 0.3 kPa @ 20.0
Vapour density (air=1)	> 1.0
Relative density (g/ml)	1.39 - 1.55
Solubility(ies)	Miscible with organic solvents.
Partition coefficient	> 2.65 log Pow
Auto-ignition temperature (°C)	>4 80
Decomposition temperature (°C)	Not determined.
Viscosity	~2.0 poise.
Explosive properties	May form explosive mixtures with air.
Oxidising properties	Not determined.

9.2. Other information

Other information	None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No data available.
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10.2. Chemical stability

Stability	Stable under recommended storage and handling conditions. (See Section 7).
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10.3. Possibility of hazardous reactions

Hazardous reactions	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
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10.4. Conditions to avoid

Conditions to avoid	When exposed to high temperatures may produce hazardous decomposition products.
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10.5. Incompatible materials

Materials to avoid	No data available.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Carbon monoxide and dioxide, smoke, oxides of nitrogen.
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SECTION 11: Toxicological information

There are no data available on the mixture itself.

The mixture has been assessed following the conventional method of the Classification, Labelling and Packaging of Substances and Mixtures Regulation (EC) No. 1272/2008, (CLP) and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

11.1. Information on toxicological effects

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

The liquid splashed in the eyes may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

SECTION 12: Ecological information

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

12.1. Toxicity

Toxicity No data available.

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available.

12.4. Mobility in soil

Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

Other adverse effects No data available.

SECTION 13: Disposal considerations

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not allow to enter drains or watercourses.

The European List of Waste classification of this product, when disposed of as waste, is

Waste Code: Name of Waste (according to Commission Decision 2000/532/EC):

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances.

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If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Using information provided in this safety data sheet, advice should be obtained from the local waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

SECTION 14: Transport information

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for Air Transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

14.1. UN number

ADR/RID/ADN	1263
IMDG	1263
ICAO	1263

14.2. UN proper shipping name

UN proper shipping name PAINT

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label number	3
IMDG Class	3
ICAO Class/Division	3
Transport labels	



14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant None.

14.6. Special precautions for user

ADR Tunnel Restriction Code	(D/E)
IMDG EmS	F-E, S-E
IMDG Stowage Category	B

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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SECTION 15: Regulatory information

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

The information in this Safety Data Sheet is required pursuant to:

- Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No. 1907/2006, (REACH).
- Classification, Labelling and Packaging of substances and mixtures, Regulation (EC) No. 1272/2008, (CLP).
- The Dangerous Substances and Explosive Atmospheres Regulations, 2002, (DSEAR).
- The Control of Substances Hazardous to Health Regulations, 2002, (COSHH).
- The Health and Safety at Work etc Act, 1974, (HSWA).

Approved Codes of Practice and Guidance notes relevant to this Safety Data Sheet:

- The European Chemicals Agency (ECHA) Guidance on the compilation of safety data sheets, Version 2.1.
- CEPE Guideline for Safety Data Sheets, 9th Edition.
- HSE Approved Code of Practice and Guidance, Dangerous Substances and Explosive Atmospheres.
- HSE guidance note, Chemical Warehousing: The Storage of Packaged Dangerous Substances.
- HSE publication, EH40/2005 Workplace exposure limits.

15.2. Chemical safety assessment

Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Full text of Hazard Statements referred to in Section 3.

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.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer.
H361d - Suspected of damaging the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.