

SAFETY DATA SHEET

Coil Clean

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

1.1. Product identifier

Product name Coil Clean
Product number AER-D-600

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

Identified uses Evaporator and condenser cleaner PC35 Washing and cleaning products

1.3. Details of the supplier of the safety data sheet

Supplier Pump House
 Glaisdale Drive East
 Nottingham
 NG8 4LY
 Tel: +44 (0)115 900 5858
 www.pumph.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0)115 900 5858

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229
Health hazards Eye Irrit. 2 - H319
Environmental hazards Not Classified

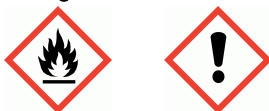
Human health Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physicochemical Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated.
 H319 Causes serious eye irritation.
 EUH208 Contains ethyl-2,3-epoxy-3-phenylbutyrate. May produce an allergic reaction.

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Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P211 Do not spray on an open flame or other ignition source.</p> <p>P251 Do not pierce or burn, even after use.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</p> <p>P102 Keep out of reach of children.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p> <p>P260 Do not breathe vapour/ spray.</p>
Detergent labelling	<p>5 - < 15% aliphatic hydrocarbons, < 5% anionic surfactants, < 5% non-ionic surfactants, < 5% perfumes, < 5% phosphates, Contains BENZYL BENZOATE, Linalol Synthetic</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	10-30%
CAS number: 68476-85-7 EC number: 270-704-2	
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280	
1-METHOXY-2-PROPANOL	5-10%
CAS number: 107-98-2 EC number: 203-539-1 REACH registration number: 01-2119457435-35	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 STOT SE 3 - H336	
3-BUTOXYPROPAN-2-OL	5-10%
CAS number: 5131-66-8 EC number: 225-878-4 REACH registration number: 01-2119475527-28	
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	
TETRA POTASSIUM PYROPHOSPHATE	1-5%
CAS number: 7320-34-5 EC number: 230-785-7 REACH registration number: 01-2119489369-18	
Classification Eye Irrit. 2 - H319	

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Alkoxypolyethoxypolypropoxypropanol	1-5%
CAS number: 68603-25-8	REACH registration number: N/A
Classification	
Acute Tox. 4 - H302	
Eye Dam. 1 - H318	
2-AMINOETHANOL	<1%
CAS number: 141-43-5	EC number: 205-483-3
	REACH registration number: 01-2119486455-28
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	
Aquatic Chronic 3 - H412	
SODIUM LAURYL SARCOSINATE	<1%
CAS number: 137-16-6	EC number: 205-281-5
	REACH registration number: 01-2119527780-39
Classification	
Acute Tox. 2 - H330	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
ethyl-2,3-epoxy-3-phenylbutyrate	<1%
CAS number: 77-83-8	EC number: 201-061-8
Classification	
Skin Sens. 1B - H317	
Aquatic Chronic 2 - H411	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards Extremely flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

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Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 150 ppm(Sk) 560 mg/m³(Sk)

3-BUTOXYPROPAN-2-OL

Long-term exposure limit (8-hour TWA): No std.

2-AMINOETHANOL

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 3 ppm 7.6 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

DNEL	Industry - Inhalation; Short term local effects: 553.5 mg/m ³ Industry - Dermal; Long term systemic effects: 369 mg/m ³ Industry - Inhalation; Long term systemic effects: 369 mg/m ³ Consumer - Dermal; Long term systemic effects: 18.1 mg/kg/day Consumer - Inhalation; Long term systemic effects: 43.9 mg/m ³ Consumer - Oral; Long term systemic effects: 3.3 mg/kg/day
PNEC	- Fresh water; 10 mg/l - Marine water; 1 mg/l - STP; 100 mg/l - Sediment (Freshwater); 41.6 mg/kg - Sediment (Marinewater); 4.17 mg/l - Soil; 2.47 mg/kg - Intermittent release; 100 mg/l

SODIUM LAURYL SARCOSINATE (CAS: 137-16-6)

DNEL	General population - Oral; systemic effects: 0.15 mg/kg General population - Inhalation; : 5 mg/m ³
PNEC	Fresh water; 29.7 µg/l Marine water; 3 µg/l

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Personal protection When using do not smoke.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
Hand protection	Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.
Hygiene measures	Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	White/off-white.
Odour	Organic solvents.
Initial boiling point and range	-40 to -2°C @ 1013 hPa
Flash point	<-40°C
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8% Upper flammable/explosive limit: 9.5%
Vapour pressure	ca. 590 to 1760 kPa @ 45°C
Vapour density	ca. 1.5 at 15°C
Auto-ignition temperature	410-580°C
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 250 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	Avoid the following conditions: Heat, sparks, flames.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.
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10.5. Incompatible materials

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Materials to avoid Keep away from oxidising materials, heat and flames.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 44,000.0

Acute toxicity - dermal

ATE dermal (mg/kg) 22,727.27

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 37.04

General information Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of exposure Inhalation

Target organs Central nervous system Respiratory system, lungs

Medical symptoms Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

1-METHOXY-2-PROPANOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 4,016.0

Species Rat

ATE oral (mg/kg) 4,016.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

ATE dermal (mg/kg) 2,000.0

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3-BUTOXYPROPAN-2-OL

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 3,100.0
mg/kg)

Species Rabbit

ATE dermal (mg/kg) 3,100.0

Alkoxypolyethoxypolypropoxypropanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 616.0
mg/kg)

Species Rat

ATE oral (mg/kg) 616.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 3,000.0
mg/kg)

Species Rabbit

ATE dermal (mg/kg) 3,000.0

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ vapours mg/l) 8.0

Species Rat

2-AMINOETHANOL

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

SODIUM LAURYL SARCOSINATE

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ dust/mist mg/l) 0.1

Species Rat

ATE inhalation
(dusts/mists mg/l) 0.1

BENZYL BENZOATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 1,500.0
mg/kg)

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Species Rat
ATE oral (mg/kg) 1,500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 4,000.0

Species Rat
ATE dermal (mg/kg) 4,000.0

2-butanone, 4-(4-hydroxyphenyl)-

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,400.0

Species Rat
ATE oral (mg/kg) 1,400.0

SECTION 12: Ecological Information

Ecotoxicity No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Toxicity Not available.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 6812 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >21100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 7 days: >1000 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC₅₀, 3 hours: >1000 mg/l, Activated sludge

3-BUTOXYPROPAN-2-OL

Toxicity Not available.

Alkoxyethoxypropoxypropanol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 13.3 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 12.3 mg/l, Daphnia magna

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SODIUM LAURYL SARCOSINATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 107 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 29.7 mg/l, Daphnia magna

BENZYL BENZOATE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

1,3,4,6,7,8-HEXAHYDRO-4,6,6,7,8,8-HEXAMETHYL-INDENO[5,6-C]PYRAN

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

LIMONENE

Toxicity Not available.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

12.2. Persistence and degradability

Persistence and degradability Not available.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Persistence and degradability Not available.

Biodegradation - Degradation 96%: 28 days

3-BUTOXYPROPAN-2-OL

Persistence and degradability Not available.

Alkoxyethoxypropoxypropanol

Persistence and degradability The product is biodegradable.

Coil Clean

Biodegradation - Degradation 70%: 28 days

LIMONENE

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Bioaccumulative potential Not available.

Partition coefficient log Kow: -0.43

3-BUTOXYPROPAN-2-OL

Bioaccumulative potential Not available.

LIMONENE

Bioaccumulative potential Not available.

12.4. Mobility in soil

Mobility Not known.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Mobility Not known.

Henry's law constant ~ 0.0000014 atm m³/mol @ °C

3-BUTOXYPROPAN-2-OL

Mobility Not known.

LIMONENE

Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Results of PBT and vPvB assessment Not available.

3-BUTOXYPROPAN-2-OL

Coil Clean

Results of PBT and vPvB assessment Not available.

LIMONENE

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

1-METHOXY-2-PROPANOL

Other adverse effects Not available.

3-BUTOXYPROPAN-2-OL

Other adverse effects Not available.

LIMONENE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Coil Clean

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

Transport labels



14.4. Packing group

ADR/RID packing group	None
IMDG packing group	None
ADN packing group	None
ICAO packing group	None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

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

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

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits. The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Supplemental information added.
Revision date	07/02/2018
Revision	5
SDS number	11538
SDS status	Approved.
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains ethyl-2,3-epoxy-3-phenylbutyrate. May produce an allergic reaction.

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.