

SAFETY DATA SHEET DW4 SOFT WATER RINSE AID

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name DW4 SOFT WATER RINSE AID

Internal identification C874

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

Identified uses Cleaning agent.

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS

RAWDON ROAD

MOIRA

SWADLINCOTE DERBYSHIRE DE12 6DA

TEL: +44 (0)1283 221044 FAX: +44 (0)1283 225731 sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements EUH208 Contains Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and

2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT). May produce an

allergic reaction.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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Precautionary statements P280 Wear protective gloves, eye and face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container in accordance with national regulations.

UFI: M1E2-70XR-D00S-JK7J

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

FATTY ALCOHOL ALKOXYLATE 10-30%

CAS number: -

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

FATTY ALCOHOL ALKOXYLATE 1-5%

CAS number: — REACH registration number: 02-

2119552554-37-0000

Classification

Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Aquatic Chronic 3 - H412

SODIUM (XYLENES AND 4-ETHYLBENZENE

1-5%

SULFONATE)

CAS number: — EC number: 701-037-1 REACH registration number: 01-

2119513350-56-xxxx

Classification

Eye Irrit. 2 - H319

CITRIC ACID ANHYDROUS <1%

CAS number: 77-92-9 EC number: 201-069-1 REACH registration number: 01-

2119457002-64-XXXX

Classification

Eye Irrit. 2 - H319

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Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-

<1%

239-6) (Mixture of CMIT/MIT)

CAS number: 55965-84-9

M factor (Acute) = 100 M factor (Chronic) = 100

Classification

Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1A - H317 Aquatic Acute 1 - H400

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

Aquatic Chronic 1 - H410

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues. If medical advice is needed, have product

container or label at hand. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any

discomfort continues.

Skin contact Wash with plenty of water. Get medical attention if symptoms are severe or persist after

washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Rinse cautiously with water for several minutes. Get medical attention if any discomfort

continues.

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

Inhalation Coughing, chest tightness, feeling of chest pressure.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Causes skin irritation. The product contains a small amount of sensitising substance. May

cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact Causes serious eye irritation.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

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Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

Sulphurous gases (SOx).

5.3. Advice for firefighters

Protective actions during firefighting

No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable p

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage. Do not enter storage areas or confined spaces unless adequately ventilated. If ventilation is inadequate, suitable respiratory protection must be worn.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Do not touch or walk into spilled material. Take care as floors and other surfaces may become slippery. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear protective gloves, eye and face protection. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid contact with contaminated tools and objects. Do not reuse empty containers. Do not empty into drains. Do not eat, drink or smoke when using this product. Do not handle broken packages without protective equipment. Avoid release to the environment. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4°C and 40°C.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

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

CITRIC ACID ANHYDROUS

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Short-term exposure limit (15-minute): WEL 10 mg/m³ dust only Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ dust only

WEL = Workplace Exposure Limit

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)

DNEL Workers - Inhalation; Long term systemic effects: 26.9 mg/m³

Workers - Dermal; Long term systemic effects: 136.25 mg/kg/day

Workers - Dermal; Long term local effects: 0.096 mg/cm²
Consumer - Inhalation; Long term systemic effects: 6.6 mg/m³
Consumer - Dermal; Long term systemic effects: 68.1 mg/kg
Consumer - Dermal; Long term local effects: 0.048 mg/cm²
Consumer - Oral; Long term systemic effects: 3.8 mg/kg/day

PNEC Fresh water; 0.23 mg/l

marine water; 0.023 mg/l Intermittent release; 2.3 mg/l

Sediment (Freshwater); 0.862 mg/kg Sediment (Marinewater); 0.0862 mg/kg

Soil; 0.037 mg/kg STP; 100 mg/l

CITRIC ACID ANHYDROUS (CAS: 77-92-9)

PNEC - Fresh water; 0.44 mg/l

- marine water; 0.044 mg/l

Sediment (Freshwater); 7.52 mg/kgSediment (Marinewater); 0.752 mg/kg

- Soil; 29.2 mg/kg

8.2. Exposure controls

Protective equipment





Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Tight-fitting safety glasses.

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Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. When used with mixtures, the protection time of gloves cannot be accurately estimated. Protective gloves should have a minimum thickness of 0.15 mm. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. It is recommended that gloves are made of the following material: Neoprene. Nitrile rubber. Rubber (natural, latex).

Hygiene measures

Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

Respiratory protection

No specific requirements are anticipated under normal conditions of use. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2. Combination filter, type A2/P2. Organic vapour + dust and mist filter. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Gas and combination filter cartridges should comply with European Standard EN14387. Particulate filters should comply with European Standard EN143. Disposable filtering half mask respirators should comply with European Standard EN149 or EN405. Check that the respirator fits tightly and the filter is changed regularly.

Environmental exposure controls

Store in a demarcated bunded area to prevent release to drains and/or watercourses. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Blue.

Odour Detergent.

Odour threshold Not determined.

pH pH (concentrated solution): >2.0

Melting point Not determined.

Initial boiling point and range Not determined.

Flash point Not determined.

Evaporation rate Not determined.

Evaporation factor Not determined.

Flammability (solid, gas) Not applicable.

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Upper/lower flammability or

explosive limits

Not determined.

Other flammability Not determined.

Vapour pressure Not determined.

Vapour density Not determined.

Relative density ~ 1.01 @ 20°C

Solubility(ies) Soluble in water.

Partition coefficient Not determined.

Auto-ignition temperature Not determined.

Decomposition Temperature Not determined.

Viscosity Not determined.

Explosive propertiesThere are no chemical groups present in the product that are associated with explosive

properties.

Oxidising properties There are no chemical groups present in the product that are associated with oxidising

properties.

Comments Information declared as "Not available" or "Not applicable" is not considered to be relevant to

the implementation of the proper control measures.

9.2. Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Reactions with the following materials may generate heat: Alkalis.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not determined.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

Sulphurous gases (SOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅o) Based on available data the classification criteria are not met.

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ATE oral (mg/kg) 16,722.41

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Extreme pH Moderate pH (> 2 and < 11.5). Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Inhalation Coughing, chest tightness, feeling of chest pressure.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Causes skin irritation. The product contains a small amount of sensitising substance. May

cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact Causes serious eye irritation.

Acute and chronic health

hazards

Irritation of eyes and mucous membranes. Irritating to skin. May cause skin sensitisation or

allergic reactions in sensitive individuals.

Route of exposure Skin and/or eye contact

Target organs Eyes Skin

Medical symptoms Allergic rash. Irritation of eyes and mucous membranes. Skin irritation.

Medical considerations Allergies.

Toxicological information on ingredients.

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FATTY ALCOHOL ALKOXYLATE

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

2,000.0

Species Rat

FATTY ALCOHOL ALKOXYLATE

Acute toxicity - oral

ATE oral (mg/kg) 500.0

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

7,200.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0

mg/kg)

Species Rabbit

CITRIC ACID ANHYDROUS

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 5,400.0

mg/kg)

Species Mouse

ATE oral (mg/kg) 5,400.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,001.0

mg/kg)

Species Rat

ATE dermal (mg/kg) 2,001.0

Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Acute toxicity - oral

Acute toxicity oral (LD₅o

53.0

mg/kg)

Species Rat

Notes (oral LD₅₀) Estimated value.

ATE oral (mg/kg) 53.0

Acute toxicity - dermal

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ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours 3.0

mg/l)

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish Not determined.

Chronic aquatic toxicity

Chronic toxicity - fish early life Not determined.

stage

Ecological information on ingredients.

FATTY ALCOHOL ALKOXYLATE

Acute aquatic toxicity

Acute toxicity - fish LC50, 48 hours: 1-10 mg/l,

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 1-10 mg/l, Daphnia magna

FATTY ALCOHOL ALKOXYLATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >10 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: >10 mg/l, Daphnia magna

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours: >1000 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅o, 96 hours: >230 mg/l, Selenastrum capricornutum

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Acute aquatic toxicity

Acute toxicity - fish LC50, 48 hours: 440 mg/l,

LC₅₀, 96 hours: 440 - 706 mg/l, Fish

Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

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Acute aquatic toxicity

LE(C)₅₀ $0.001 < L(E)C50 \le 0.01$

M factor (Acute) 100

Acute toxicity - fish Estimated value.

LC₅₀, 96 hours: 13 mg/l, Fish

Chronic aquatic toxicity

NOEC 0.0001 < NOEC ≤ 0.001

Degradability Non-rapidly degradable

M factor (Chronic) 100

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility Soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

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

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Disposal of this product, process solutions, residues and by-products should at all times

comply with the requirements of environmental protection and waste disposal legislation and

any local authority requirements.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

Special Provisions note

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

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Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

UFI: M1E2-70XR-D00S-JK7J

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Commission Regulation (EU) No 2015/830 of 28 May 2015.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level.

EC₅₀: 50% of maximal Effective Concentration.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅: Lethal Dose to 50% of a test population (Median Lethal Dose).

NOEC: No Observed Effect Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006. UN: United Nations.

vPvB: Very Persistent and Very Bioaccumulative.

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Classification abbreviations

Acute Tox. = Acute toxicity

and acronyms

Aquatic Acute = Hazardous to the aquatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Eye Dam. = Serious eye damage

Eye Irrit. = Eye irritation Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 15/09/2020

Revision 3.0

Supersedes date 15/02/2017

SDS number 16354

Hazard statements in full H301 Toxic if swallowed.

H302 Harmful if swallowed. H311 Toxic 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.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT). 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.