



## SAFETY DATA SHEET

### ARBO SMALL GAP SEALER - CLEAR

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

##### 1.1. Product identifier

**Product name** ARBO SMALL GAP SEALER - CLEAR

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

**Identified uses** Sealer for use in joints of 3mm or less. Sealing of mitre joints, cleats, screws and hinges in window assemblies.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Adshead Ratcliffe & Co. Ltd.  
Derby Road, Belper  
Derbyshire.  
DE56 1WJ  
Tel. (+44) 01773 826661  
Fax. (+44) 01773 821215  
sds@arbo.co.uk

##### 1.4. Emergency telephone number

**Emergency telephone** (+44) 01773 826661 (office hours only)

#### SECTION 2: Hazards identification

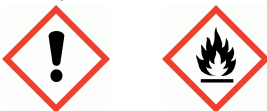
##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

**Physical hazards** Flam. Liq. 2 - H225  
**Health hazards** Eye Irrit. 2 - H319 Elicitation - EUH208 STOT SE 3 - H336  
**Environmental hazards** Not Classified

##### 2.2. Label elements

###### Pictogram



**Signal word** Danger

**Hazard statements** H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
EUH208 Contains EPOXY RESIN (Number average MW <= 700 ), BISPHENOL F - EPICHLOROHYDRIN RESIN (number average MW <= 700). May produce an allergic reaction.

## ARBO SMALL GAP SEALER - CLEAR

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing vapours.</p> <p>P280 Wear eye protection.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Contains</b>	<p>BUTANONE, ACETONE, ETHYL ACETATE, BUTYL ACETATE -norm, EPOXY RESIN (Number average MW &lt;= 700 ), BISPHENOL F - EPICHLOROHYDRIN RESIN (number average MW &lt;= 700)</p>

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

<b>BUTANONE</b>	<b>10-30%</b>
CAS number: 78-93-3	EC number: 201-159-0
<b>Classification</b>	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
<b>ACETONE</b>	<b>5-10%</b>
CAS number: 67-64-1	EC number: 200-662-2
<b>Classification</b>	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
<b>ETHYL ACETATE</b>	<b>5-10%</b>
CAS number: 141-78-6	EC number: 205-500-4
<b>Classification</b>	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
<b>BUTYL ACETATE -norm</b>	<b>1-5%</b>
CAS number: 123-86-4	EC number: 204-658-1
<b>Classification</b>	
Flam. Liq. 3 - H226	
STOT SE 3 - H336	

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<b>EPOXY RESIN (Number average MW &lt;= 700 )</b>	<b>&lt;1%</b>
CAS number: 25068-38-6	EC number: 500-033-5
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
<b>BISPHENOL F - EPICHLOROHYDRIN RESIN (number average MW &lt;= 700)</b>	<b>&lt;1%</b>
CAS number: 28064-14-4	
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

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

**Composition comments** Acrylic resin, and vinyl resin, with auxiliaries. in solvent mixture.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Get medical attention if any discomfort continues or if large amounts have been ingested.
<b>Skin contact</b>	Wipe off excess material with cloth or paper. Use resin removing cream. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>Inhalation</b>	Vapours may cause drowsiness and dizziness. Irritation of nose, throat and airway.
<b>Ingestion</b>	May cause discomfort if swallowed. May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin. Allergic rash.
<b>Eye contact</b>	Irritation of eyes and mucous membranes.

#### 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

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**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray, fog or mist.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Solvent vapours may form explosive mixtures with air. In case of fire, toxic gases may be formed.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Keep up-wind to avoid fumes. Fight fire from safe distance or protected location. Move containers from fire area if it can be done without risk. Be aware of danger of explosion. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. Do not use water jet as an extinguisher, as this will spread the fire.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear appropriate protective clothing. Avoid inhalation of vapours and contact with skin and eyes. Eliminate all sources of ignition. Take precautionary measures against static discharges.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb spillage with non-combustible, absorbent material.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Keep away from heat, sparks and open flame. Do not use in confined spaces without adequate ventilation and/or respirator. Contaminated rags and cloths must be put in fireproof containers for disposal.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated.

### 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. Keep away from oxidising materials, heat and flames. Protect from sunlight.

**Storage class** Flammable liquid storage.

### 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

##### **BUTANONE**

Long-term exposure limit (8-hour TWA): WEL 200 ppm 600 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 300 ppm 899 mg/m<sup>3</sup>

Sk

##### **ACETONE**

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m<sup>3</sup>

##### **ETHYL ACETATE**

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

##### **BUTYL ACETATE -norm**

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

#### **BUTANONE (CAS: 78-93-3)**

<b>DNEL</b>	<p>Workers - Inhalation; Long term systemic effects: 600 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term systemic effects: 1161 mg/kg/day</p> <p>General population - Inhalation; Long term systemic effects: 106 mg/m<sup>3</sup></p> <p>General population - Dermal; Long term systemic effects: 412 mg/kg/day</p> <p>General population - Oral; Long term systemic effects: 31 mg/kg/day</p>
<b>PNEC</b>	<p>- Fresh water; 55.8 mg/l</p> <p>- Marine water; 55.8 mg/l</p> <p>- Intermittent release; 55.8 mg/l</p> <p>- STP; 709 mg/l</p> <p>- Sediment (Freshwater); 284.7 mg/kg</p> <p>- Sediment (Marinewater); 284.7 mg/kg</p> <p>- Soil; 22.5 mg/kg</p> <p>- Oral (food); 1000 mg/kg</p>

#### **ETHYL ACETATE (CAS: 141-78-6)**

<b>DNEL</b>	<p>Workers - Inhalation; Long term systemic effects: 734 mg/m<sup>3</sup></p> <p>Workers - Inhalation; Short term systemic effects: 1468 mg/m<sup>3</sup></p> <p>Workers - Inhalation; Long term local effects: 734 mg/m<sup>3</sup></p> <p>Workers - Inhalation; Short term local effects: 1468 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term systemic effects: 63 mg/kg/day</p> <p>General population - Inhalation; Long term systemic effects: 367 mg/m<sup>3</sup></p> <p>General population - Inhalation; Short term systemic effects: 734 mg/m<sup>3</sup></p> <p>General population - Inhalation; Long term local effects: 367 mg/m<sup>3</sup></p> <p>General population - Inhalation; Short term local effects: 734 mg/m<sup>3</sup></p> <p>General population - Dermal; Long term systemic effects: 37 mg/kg/day</p>
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<b>PNEC</b>	- Fresh water; 0.24 mg/l
	- Marine water; 0.024 mg/l
	- Intermittent release; 1.65 mg/l
	- STP; 650 mg/l
	- Sediment (Freshwater); 1.15 mg/kg
	- Sediment (Marinewater); 0.115 mg/kg
	- Soil; 0.148 mg/kg

### BUTYL ACETATE -norm (CAS: 123-86-4)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 480 mg/m <sup>3</sup>
	Workers - Inhalation; Short term systemic effects: 960 mg/m <sup>3</sup>
	Workers - Inhalation; Long term local effects: 480 mg/m <sup>3</sup>
	Workers - Inhalation; Short term local effects: 960 mg/m <sup>3</sup>
	General population - Inhalation; Long term systemic effects: 102.34 mg/m <sup>3</sup>
	General population - Inhalation; Short term systemic effects: 859.7 mg/m <sup>3</sup>
	General population - Inhalation; Long term local effects: 102.34 mg/m <sup>3</sup>
General population - Inhalation; Short term local effects: 859.7 mg/m <sup>3</sup>	

<b>PNEC</b>	- Fresh water; 0.18 mg/l
	- Marine water; 0.018 mg/l
	- Intermittent release; 0.36 mg/l
	- STP; 35.6 mg/l
	- Sediment (Freshwater); 0.981 mg/kg
	- Sediment (Marinewater); 0.0981 mg/kg
	- Soil; 0.0903 mg/kg

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

### Eye/face protection

The following protection should be worn: Chemical splash goggles.

### Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Butyl rubber. Polytetrafluoroethylene (PTFE, Teflon).

### Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

### Hygiene measures

Provide eyewash station and safety shower. Use engineering controls to reduce air contamination to permissible exposure level. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

### Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. It is recommended to use respiratory equipment with combination filter, type A2/P2.

### Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

## ARBO SMALL GAP SEALER - CLEAR

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Clear.
<b>Odour</b>	Ketonic.
<b>Odour threshold</b>	Lower Butanone: 2 ppm Upper Butanone: 83 ppm
<b>pH</b>	Not applicable.
<b>Melting point</b>	Butanone: -86°C
<b>Initial boiling point and range</b>	Butanone: 79.6°C @ 1013 hPa
<b>Flash point</b>	Butanone: -6°C CC (Closed cup).
<b>Evaporation rate</b>	Butanone: 6.00
<b>Evaporation factor</b>	No information available
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: Butanone: 1.80 Upper flammable/explosive limit: Butanone: 11.50
<b>Vapour pressure</b>	Butanone: 10.3 kPa @ 20°C
<b>Vapour density</b>	Butanone: 2.42
<b>Relative density</b>	Butanone: 1.01 @ 20°C
<b>Solubility(ies)</b>	Butanone: 27.00 g/100 g water @ 20°C
<b>Partition coefficient</b>	Not applicable.
<b>Auto-ignition temperature</b>	Butanone: 404°C
<b>Viscosity</b>	300 - 400 P @ 20°C
<b>Explosive properties</b>	Standard tests for this endpoint are for single substances and are not appropriate for this mixture.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 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 known. Will not polymerise.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

#### 10.5. Incompatible materials

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**Materials to avoid** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** None at ambient temperatures. Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** There are no data available on this product.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes eye irritation.

#### Respiratory sensitisation

**Respiratory sensitisation** There is no evidence that the material can lead to respiratory hypersensitivity.

#### Skin sensitisation

**Skin sensitisation** The product contains small amounts of sensitising substances which may cause an allergic reaction in sensitive individuals.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Does not contain any substances known to be mutagenic.

#### 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.

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

#### General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

#### Inhalation

Vapours may cause drowsiness and dizziness.

#### Ingestion

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

#### Skin contact

May cause sensitisation or allergic reactions in sensitive individuals.

#### Eye contact

May cause severe eye irritation.

#### Route of entry

Inhalation Ingestion. Skin and/or eye contact

#### Target organs

Central nervous system Eyes Gastro-intestinal tract Respiratory system, lungs Skin

#### Medical considerations

Skin disorders and allergies. Central nervous system depression.

### Toxicological information on ingredients.

#### BUTANONE

##### Acute toxicity - oral

##### Notes (oral LD<sub>50</sub>)

LD<sub>50</sub> 3460 mg/kg, Oral, Rat



## ARBO SMALL GAP SEALER - CLEAR

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 10 mL/kg bw, Dermal, Rabbit

### Skin corrosion/irritation

**Animal data** Not irritating.

### Serious eye damage/irritation

**Serious eye damage/irritation** Irritating.

### Skin sensitisation

**Skin sensitisation** Buehler test - Guinea pig: Not sensitising.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Negative.

**Genotoxicity - in vivo** Negative.

### Reproductive toxicity

**Reproductive toxicity - development** Maternal toxicity: - NOAEC: 1002 ppm, Inhalation, Rat  
Teratogenicity: - NOAEC: 1002 ppm, Inhalation, Rat

## SECTION 12: Ecological Information

**Ecotoxicity** There are no data on the ecotoxicity of this product.

### 12.1. Toxicity

#### Ecological information on ingredients.

#### BUTANONE

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 2993 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 308 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 48 hours: 1888 mg/l, Selenastrum capricornutum

**Acute toxicity - microorganisms** TT (Toxicity threshold), 16 hours: 1150 mg/l, Pseudomonas putida

### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### Ecological information on ingredients.

#### BUTANONE

**Biodegradation** The substance is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not applicable.

#### Ecological information on ingredients.

#### BUTANONE

## ARBO SMALL GAP SEALER - CLEAR

**Partition coefficient**                      log Pow: 0.29

### 12.4. Mobility in soil

**Mobility**    The product has poor water-solubility.

### 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 known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information**                                      Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. When handling waste, the safety precautions applying to handling of the product should be considered. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids.

**Disposal methods**    Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Confirm disposal procedures with environmental engineer and local regulations.

**Waste class**    HP3 Flammable HP4 Irritant Recommended EWC Code 14 06 03\*

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)**    1133

**UN No. (IMDG)**    1133

**UN No. (ICAO)**    1133

**UN No. (ADN)**    1133

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)**                              ADHESIVES containing flammable liquid

**Proper shipping name (IMDG)**                              ADHESIVES containing flammable liquid

**Proper shipping name (ICAO)**                              ADHESIVES containing flammable liquid

**Proper shipping name (ADN)**                              ADHESIVES containing flammable liquid

### 14.3. Transport hazard class(es)

**ADR/RID class**    3

**ADR/RID classification code**                              F1

**ADR/RID label**    3

**IMDG class**    3

**ICAO class/division**    3

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ADN class 3

**Transport labels****14.4. Packing group**

ADR/RID packing group II

IMDG packing group II

ADN packing group II

ICAO packing group II

**14.5. Environmental hazards**

Environmentally hazardous substance/marine pollutant

No.

**14.6. Special precautions for user**

EmS F-E, S-D

ADR transport category 2

Emergency Action Code •3YE

Hazard Identification Number 33  
(ADR/RID)

Tunnel restriction code (D/E)

**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**

EU legislation Regulation (EC) 1907/2006 REACH (as amended).  
Regulation (EC) 1272/2008 CLP (as amended).

Guidance Workplace Exposure Limits EH40.

**15.2. Chemical safety assessment****SECTION 16: Other information**

Revision comments General review

Revision date 25/04/2017

Revision 1

Supersedes date 13/09/2012

SDS number 10135

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### Hazard statements in full

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains EPOXY RESIN (Number average MW  $\leq$  700 ), BISPHENOL F - EPICHLOROHYDRIN RESIN (number average MW  $\leq$  700). 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.