

## SAFETY DATA SHEET

### ASSA LOCK CLEANER DE-ICER

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

##### 1.1. Product identifier

Product name ASSA LOCK CLEANER DE-ICER

Product number 11855

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

Identified uses Antifreeze liquid.

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

Supplier ASSA AB  
BOX 371  
631 05 Eskilstuna  
Sweden

0046 (0)16-17 70 00

0046 (0)16-17 70 49

orderack@assa.se

##### 1.4. Emergency telephone number

National emergency telephone number See local emergency number.

#### SECTION 2: Hazards identification

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

###### Classification

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) F+, R12. Xi; R36. N; R51/53. R66, R67

**Human health** Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Irritating to eyes.

**Environmental** The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

**Physicochemical** Extremely flammable. Pressure chamber may explode in the event of fire.

##### 2.2. Label elements

###### Pictogram



Signal word

Danger

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<b>Hazard statements</b>	H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H319 Causes serious eye irritation. H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated
<b>Precautionary statements</b>	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P273 Avoid release to the environment. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/container in accordance with national regulations.
<b>Supplemental label information</b>	EUH066 Repeated exposure may cause skin dryness or cracking.
<b>Contains</b>	HYDROCARBONS, C6-C7, ISOALKANES, CYCLICS, <5% N-HEXANE, PROPAN-2-OL
<b>Supplementary precautionary statements</b>	P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER/doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

### 2.3. Other hazards

Contains: Isobutane. 15-30% Aliphatic hydrocarbons. This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>HYDROCARBONS, C6-C7, ISOALKANES, CYCLICS, &lt;5% N-HEXANE</b>	<b>30-60%</b>
CAS number: —	EC number: 926-605-8
	REACH registration number: 01-2119486291-36
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Flam. Liq. 2 - H225	Xn;R65. F;R11. N;R51/53. R66,R67.
Asp. Tox. 1 - H304	
STOT SE 3 - H336	
Aquatic Chronic 2 - H411	

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<b>PROPAN-2-OL</b>		<b>10-30%</b>
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25
<b>Classification</b> Flam. Liq. 2 - H225 STOT SE 3 - H336 Eye Irrit. 2 - H319	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11 Xi;R36 R67	
<b>BUTANE</b>		<b>10-30%</b>
CAS number: 106-97-8	EC number: 203-448-7	REACH registration number: 01-2119474691-32
<b>Classification</b> Flam. Gas 1 - H220 Press. Gas, Compressed - H280	<b>Classification (67/548/EEC or 1999/45/EC)</b> F+;R12	
<b>PROPANE</b>		<b>10-30%</b>
CAS number: 74-98-6	EC number: 200-827-9	REACH registration number: 01-2119486944-21
<b>Classification</b> Flam. Gas 1 - H220 Press. Gas, Compressed - H280	<b>Classification (67/548/EEC or 1999/45/EC)</b> F+;R12	
<b>PENTANE</b>		<b>&lt;1%</b>
CAS number: 109-66-0	EC number: 203-692-4	
<b>Classification</b> Flam. Liq. 2 - H225 Asp. Tox. 1 - H304 STOT SE 3 - H336 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> F+;R12 Xn;R65 R66 R67 N;R51/53	

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Drink a few glasses of water or milk. Do not induce vomiting.
<b>Skin contact</b>	Wash skin thoroughly with soap and water.
<b>Eye contact</b>	Rinse with water. Get medical attention if any discomfort continues.

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

<b>General information</b>	Solvent abuse can kill instantly.
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<b>Inhalation</b>	Vapours may cause headache, fatigue, dizziness and nausea.
<b>Ingestion</b>	May cause nausea, headache, dizziness and intoxication.
<b>Skin contact</b>	Prolonged skin contact may cause redness and irritation.
<b>Eye contact</b>	Irritation of eyes and mucous membranes.

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

<b>Notes for the doctor</b>	No specific recommendations.
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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder.
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### **5.2. Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Containers can burst violently or explode when heated, due to excessive pressure build-up. Extremely flammable.
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### **5.3. Advice for firefighters**

<b>Protective actions during firefighting</b>	Containers close to fire should be removed or cooled with water.
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<b>Special protective equipment for firefighters</b>	Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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## **SECTION 6: Accidental release measures**

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

<b>Personal precautions</b>	For personal protection, see Section 8.
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### **6.2. Environmental precautions**

<b>Environmental precautions</b>	Do not discharge into drains or watercourses or onto the ground.
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### **6.3. Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
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### **6.4. Reference to other sections**

<b>Reference to other sections</b>	For personal protection, see Section 8. For waste disposal, see section 13.
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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Usage precautions</b>	Keep away from heat, sparks and open flame. Protect against direct sunlight. Avoid eating, drinking and smoking when using the product.
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### **7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage precautions</b>	Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep container dry.
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### **7.3. Specific end use(s)**

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## **SECTION 8: Exposure Controls/personal protection**

## ASSA LOCK CLEANER DE-ICER

### 8.1. Control parameters

#### Occupational exposure limits

##### PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

##### BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m<sup>3</sup>

##### PENTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1800 mg/m<sup>3</sup>

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

WEL = Workplace Exposure Limit

#### HYDROCARBONS, C6-C7, ISOALKANES, CYCLICS, <5% N-HEXANE

##### DNEL

Professional - Dermal; Long term systemic effects: 13694 mg/kg/day

Professional - Inhalation; Long term systemic effects: 5306 mg/m<sup>3</sup>

Consumer - Dermal; Long term systemic effects: 1377 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 1131 mg/m<sup>3</sup>

Consumer - Oral; Long term systemic effects: 1301 mg/kg/day

#### PENTANE (CAS: 109-66-0)

##### PNEC

- water; 0,027 mg/l

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

All handling should only take place in well-ventilated areas.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles.

#### Hand protection

Use protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber.

#### Other skin and body protection

Provide eyewash station and safety shower.

#### Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Use respiratory equipment with combination filter type AX2/P2

#### Environmental exposure controls

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

Aerosol.

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<b>Colour</b>	Colourless.
<b>Odour</b>	Solvent.
<b>Flash point</b>	Technical impossibility to obtain the data.
<b>Relative density</b>	~0,7 @ °C
<b>Solubility(ies)</b>	Insoluble in water.

### 9.2. Other information

<b>Other information</b>	Not relevant.
<b>Volatile organic compound</b>	No information required.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Not known.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Not known.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Toxicological effects</b>	No data is available regarding the preparation it self.
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<b>General information</b>	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
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<b>Inhalation</b>	Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. May cause respiratory system irritation.
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<b>Ingestion</b>	May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.
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<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.
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<b>Eye contact</b>	May cause temporary eye irritation.
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<b>Acute and chronic health hazards</b>	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Nausea, vomiting. Headache.
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### Toxicological information on ingredients.

#### PROPAN-2-OL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 4,396

Species Rat

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 12,800

Species Rabbit

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 72.6

Species Rat

ATE inhalation (vapours mg/l) 72.6

##### Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

#### BUTANE

##### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Not applicable.

##### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Not applicable.

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 20

Notes (inhalation LC<sub>50</sub>)

#### PROPANE

##### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Not applicable.

##### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Not applicable.

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 20

Notes (inhalation LC<sub>50</sub>)

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### PENTANE

#### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 400

Species Rat

#### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 3,000

Species Rabbit

#### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 364

Species Rat

ATE inhalation (vapours mg/l) 364

### SECTION 12: Ecological Information

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

#### 12.1. Toxicity

**Toxicity** No data is available regarding the preparation itself.

#### Ecological information on ingredients.

### PROPAN-2-OL

Acute toxicity - fish LC50, 96 hours, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC<sub>50</sub>, 48 hours, 48 hours: 13299 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC<sub>50</sub>, 72 hours, 72 hours: 1800 mg/l,

### BUTANE

Acute toxicity - fish Highly volatile.  
LC50, 96 hours, 96 hours: 24.11 mg/l,

Acute toxicity - aquatic invertebrates Highly volatile.  
EC<sub>50</sub>, 48 hours, 48 hours: 14.22 mg/l, Daphnia magna

### PROPANE

Acute toxicity - aquatic invertebrates Highly volatile.  
EC<sub>50</sub>, 48 hours, 48 hours: 27.14 mg/l,

Acute toxicity - aquatic plants , : ,



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### PENTANE

<b>Acute toxicity - fish</b>	LC50, 96 hours, 96 hours: 4,26 mg/l, Onchorhynchus mykiss (Rainbow trout)
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours, 48 hours: 2,7-9,1 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	IC <sub>50</sub> , 72 hours, 72 hours: 7,51 mg/l, Selenastrum capricornutum

### 12.2. Persistence and degradability

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

### Ecological information on ingredients.

#### BUTANE

<b>Persistence and degradability</b>	The product is readily biodegradable.
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#### PROPANE

<b>Persistence and degradability</b>	The product is readily biodegradable.
<b>Biodegradation</b>	- :

### 12.3. Bioaccumulative potential

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

### Ecological information on ingredients.

#### BUTANE

<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
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#### PROPANE

<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
<b>Partition coefficient</b>	:

#### PENTANE

<b>Bioaccumulative potential</b>	BCF: 171,
<b>Partition coefficient</b>	log Pow: 3,4

### 12.4. Mobility in soil

**Mobility** No information available

### Ecological information on ingredients.

#### BUTANE

<b>Mobility</b>	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
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## PROPANE

### Mobility

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

### 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** No information required.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** The manufacturer of this product complies with the rules and regulations of the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, by paying packaging fees for disposal and recycling of packaging waste.

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

**Waste class** EWC 14 06 03\*

## SECTION 14: Transport information

**General** Aerosols may be carried domestically as limited quantities ( 1L ) as long as each package does not exceed 30 kg in cardboard boxes or 20 kg on trays with shrink- or stretch wrapping. Each package shall be marked with diamond-shaped area, the top and bottom part is black, surrounded by a line that measures at least 100 mm x 100 mm.

### 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

**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

## ASSA LOCK CLEANER DE-ICER

ICAO class/division 2.1

ADN class 2.1

### Transport labels



### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant



### 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 MARPOL73/78 and the IBC Code

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

## SECTION 15: Regulatory information

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

**National regulations** COUNCIL DIRECTIVE of may 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.

**EU legislation** 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).  
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).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**General information** A review of safety data sheet with staff to manage the product recommended.

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

**Issued by** Björkstедt

**Revision date** 27/08/2014

**Revision** 4

**Supersedes date** 07/10/2012

## ASSA LOCK CLEANER DE-ICER

### Risk phrases in full

R11 Highly flammable.  
R12 Extremely flammable.  
R36 Irritating to eyes.  
R45 May cause cancer.  
R46 May cause heritable genetic damage.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

### Hazard statements in full

H220 Extremely flammable gas.  
H222 Extremely flammable aerosol.  
H225 Highly flammable liquid and vapour.  
H229 Pressurised container: may burst if heated  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

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.