



SAFETY DATA SHEET FOSROC PRIMER 19 PART B

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

1.1. Product identifier

Product name FOSROC PRIMER 19 PART B

Product number A2104020UK9

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

Identified uses Hardener component of two part epoxy system

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc Limited
 Drayton Manor Business Park
 Coleshill Road
 Tamworth
 Staffordshire
 B78 3XN
 England
 Tel: +44 (0) 1827 262222
 Fax: +44 (0) 1827 262444
 enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335, H336 STOT RE 2 - H373

Environmental hazards Not Classified

Human health Heating may generate vapours which irritate the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. May cause drowsiness or dizziness.

Physicochemical The product is flammable.

2.2. Label elements

Hazard pictograms



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Signal word	Danger
Hazard statements	<p>H226 Flammable liquid and vapour. H332 Harmful if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer by inhalation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure if inhaled.</p>
Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	N-BUTYL ACETATE, DIPHENYLMETHANE DIISOCYANATE
Supplementary precautionary statements	<p>P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P284 [In case of inadequate ventilation] wear respiratory protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/ attention. P312 Call a POISON CENTRE/doctor if you feel unwell. P314 Get medical advice/ attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.</p>

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients
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3.2. Mixtures

N-BUTYL ACETATE		30-60%
CAS number: 123-86-4	EC number: 204-658-1	REACH registration number: 01-2119485493-29-0000
Classification		
Flam. Liq. 3 - H226 STOT SE 3 - H336		
DIPHENYLMETHANE DIISOCYANATE		30-60%
CAS number: 9016-87-9	EC number: 618-498-9	
Classification		
Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373		
TRIETHYL ORTHOFORMATE		1-5%
CAS number: 122-51-0	EC number: 204-550-4	
Classification		
Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319		

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

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove affected person from source of contamination. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention. Show this Safety Data Sheet to the medical personnel.

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.
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Inhalation	Irritation of nose, throat and airway. May cause sensitisation by inhalation. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Ingestion	Harmful if swallowed. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	May cause sensitisation by skin contact. Symptoms following overexposure may include the following: Redness. Dryness and/or cracking.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. May cause blurred vision and serious eye damage.

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

Notes for the doctor Treatment of acute irritation or bronchial constriction is primarily symptomatic.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder. Larger fires: Water spray.

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 Vapours may ignite.

Hazardous combustion products Heating may generate the following products: Carbon monoxide (CO). Oxides of nitrogen.

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. Control run-off water by containing and keeping it out of sewers and watercourses.

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 Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Contain spillage with sand, earth or other suitable non-combustible material. Do not discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Remove mechanically; cover the remainder with wet, absorbent material (e.g. sawdust, chemical binder based on calcium silicate hydrate, sand). After approx. one hour transfer to waste container and do not seal (evolution of CO₂!). Keep damp in a safe ventilated area for several days. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Spill area can be decontaminated with 10% sodium carbonate, 2% detergent solution in water.

6.4. Reference to other sections

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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 Provide adequate general and local exhaust ventilation. Avoid inhalation of vapours and spray/mists. Avoid contact with skin, eyes and clothing. Observe any occupational exposure limits for the product or ingredients. Avoid spilling. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product.

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.

Storage class Chemical storage. Flammable liquid 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

N-BUTYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³

Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

DIPHENYLMETHANE DIISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m³

Short-term exposure limit (15-minute): WEL 0.07 mg/m³

WEL = Workplace Exposure Limit

N-BUTYL ACETATE (CAS: 123-86-4)

DNEL Professional - Inhalation; Short term systemic effects: 960 mg/m³
Professional - Inhalation; Long term systemic effects: 480 mg/m³

PNEC

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

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use explosion-proof general and local exhaust ventilation.

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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: Wear tight-fitting, chemical splash goggles or face shield.
Hand protection	Wear protective gloves made of the following material: Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC). Laminate of polyethylene and ethylene vinyl alcohol (PE/EVOH). Viton rubber (fluoro rubber). 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.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Odour	Musty (mouldy). Sharp
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	126°C @ 101 kPa
Flash point	29°C Closed cup.
Evaporation rate	1
Evaporation factor	Not determined.
Flammability (solid, gas)	No.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	1.3 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.2 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	>350°C
Decomposition Temperature	Not determined.

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Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
Other information	No data available.
Volatile organic compound	This product contains a maximum VOC content of 695 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Water, forming CO ₂ ; in closed containers, risk of bursting owing to pressure increase. The reactivity data for this product will be typical of those for the following class of materials: Isocyanates.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with substances which contain active hydrogen. Reacts with water, with formation of carbon dioxide. The following materials may react violently with the product: Strong oxidising agents. May polymerise. Polymerises above 200°C with evolution of CO ₂
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat. Avoid contact with the following materials: Strong oxidising agents. Water, moisture.
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10.5. Incompatible materials

Materials to avoid	Water, Alcohols, Amines, Bases and Acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products when stored and handled correctly. Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrogen cyanide (HCN). Nitrous gases (NO _x). Hydrocarbons. Isocyanates.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	12,000.0
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Species	Rat
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Notes (oral LD₅₀)	The toxicological assessment is based on a knowledge of the toxicity of the product's components.
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Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	3.72
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Inhalation	Harmful by inhalation. May cause respiratory system irritation. May cause sensitisation by inhalation.
Ingestion	Harmful if swallowed. May cause nausea, vomiting and diarrhoea.
Skin contact	Harmful in contact with skin. Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.
Acute and chronic health hazards	Repeated and prolonged skin contact may lead to skin disorders.
Target organs	Skin Eyes Respiratory system, lungs
Medical considerations	May cause allergic contact eczema. Prolonged or repeated exposure may cause the following adverse effects: Allergic rash. Get medical attention.

Toxicological information on ingredients.

N-BUTYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 11,770.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 14,112.0

Species Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Inconclusive data.

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Specific target organ toxicity - single exposure

STOT - single exposure NOAEC 500 ppmV/4hr, Inhalation, Rat Vapours may cause drowsiness and dizziness.

DIPHENYLMETHANE DIISOCYANATE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >10000 mg/kg, Oral, Rat

Acute toxicity - dermal

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Notes (dermal LD₅₀)	LD ₅₀ >9400 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	0.31
Species	Rat
Notes (inhalation LC₅₀)	The substance was tested in a form that is different from the forms in which the substance is placed on the market and which it can reasonably be expected to be used. Therefore a modified classification is justified.
ATE inhalation (dusts/mists mg/l)	1.5
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising.
<u>Carcinogenicity</u>	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow)
The toxicological assessment is based on a knowledge of the toxicity of the product's components.

Ecological information on ingredients.

N-BUTYL ACETATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 18 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 44 mg/l, Daphnia magna

DIPHENYLMETHANE DIISOCYANATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 1000 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants EC₅₀, 72 hours: >1640 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms EC₅₀, 3 hours: >100 mg/l, Activated sludge

12.2. Persistence and degradability

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Persistence and degradability The product contains persistent (not readily degradable) substances. The product reacts with water to form a solid, insoluble reaction product which is not biodegradable.

Ecological information on ingredients.

N-BUTYL ACETATE

Persistence and degradability The product is readily biodegradable.

DIPHENYLMETHANE DIISOCYANATE

Persistence and degradability The product is not biodegradable.

Stability (hydrolysis) - Half-life : 20 hours @ 25°C
Hydrolyses rapidly in water.

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances.

Partition coefficient Not determined.

Ecological information on ingredients.

N-BUTYL ACETATE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: 15.3,

Partition coefficient log Pow: 2.3

DIPHENYLMETHANE DIISOCYANATE

Bioaccumulative potential Reacts with water.

12.4. Mobility in soil

Mobility The product contains organic solvents which will evaporate easily from all surfaces. The product hardens to a solid, immobile substance.

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.

Ecological information on ingredients.

N-BUTYL ACETATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

DIPHENYLMETHANE DIISOCYANATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste is classified as hazardous waste. Note that fully cured material is not considered as hazardous waste.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Absorb in vermiculite, dry sand or earth and place into containers.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1866
UN No. (IMDG)	1866
UN No. (ICAO)	1866

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	RESIN SOLUTION
Proper shipping name (IMDG)	RESIN SOLUTION
Proper shipping name (ICAO)	RESIN SOLUTION
Proper shipping name (ADN)	RESIN SOLUTION

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID label	3
IMDG class	3
ICAO class/division	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	30

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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 relevant.

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).
EU legislation	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). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Only trained personnel should use this material. For professional users only.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	17/07/2019
Revision	5b
Supersedes date	15/11/2017
SDS number	12460
Hazard statements in full	H226 Flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer by inhalation. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure if inhaled.

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.