

## PROFESSIONAL INFORMATION

### SCHEDULING STATUS:

**S2**

### 1. NAME OF THE MEDICINE

**CORENZA-C**

### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION:

<b>Each tablet contains:</b>	
Moroxydine hydrochloride	100 mg
Phenylephrine HCl	7,5 mg
Chlorphenamine maleate	2 mg
Acetylsalicylic acid (aspirin)	500 mg
Vitamin C (ascorbic acid)	500 mg

Sugar free

Contains sweetener: Sodium saccharin 2,5 mg and mannitol 200 mg per tablet

For full list of excipients, see section 6.1

### 3. PHARMACEUTICAL FORM

White, effervescent tablet.

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### 4. CLINICAL PARTICULARS:

#### 4.1 Therapeutic Indications

CORENZA-C is used for the relief of symptoms associated with rhinitis, laryngitis and symptoms of colds and influenza.

#### 4.2 Posology and method of administration

Use the lowest effective dose for the shortest possible duration of treatment.

*Adults:* 2 tablets immediately, thereafter 1 tablet 3 to 4 times a day as required.

*Paediatric population:* CORENZA-C should not be used in children under the age 12 years (see section 4.3).

*Method of administration:* Drop the tablet in half a glass of cold water. The tablet quickly dissolves producing an effervescent drink. Drink the mixture as soon as the effervescing has stopped.

#### 4.3 Contraindications:

- Hypersensitivity to any of the ingredients in CORENZA-C.
- Dyspepsia, lesions of the gastric mucosa, renal dysfunction or hepatic impairment, haemophilia or other haemorrhagic disorders.
- Patients with severe hyperthyroidism, gout, diabetes mellitus, prostatic hyperplasia, high blood pressure, heart conditions, asthma, chronic urticaria, chronic rhinitis, hypersensitivity to pseudoephedrine and other NSAIDs
- Patients with heart failure.
- Patients with a history of gastrointestinal perforation, ulceration or bleeding (PUBs) related to previous NSAIDs, including CORENZA-C, and/or active or history of recurrent ulcer/ haemorrhage/ perforations.
- Children under the age of 12 years.
- Avoid use of NSAIDs in women around 30 weeks gestation and later in pregnancy due to the risks of oligohydramnios/foetal renal dysfunction and premature closure of the foetal ductus arteriosus.

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### 4.4 Special warnings and precautions for use

- Acetylsalicylic acid (aspirin) has been implicated in Reye's syndrome, a rare but serious illness, in children and teenagers with chickenpox and influenza. A doctor should be consulted before acetylsalicylic acid (aspirin) is used in such patients.
- Acetylsalicylic acid (aspirin) has been associated with haemolytic anaemia in patients with G6PD deficiency.
- Acetylsalicylic acid (aspirin) may interfere with insulin and glucagon control in diabetics and may cause hepatotoxicity in patients with juvenile idiopathic arthritis or other connective tissue disorders.
- Acetylsalicylic acid (aspirin) prolongs bleeding time and should be stopped several days prior to scheduled surgical procedures.
- Continuous prolonged use of acetylsalicylic acid (aspirin) should be avoided in the elderly, because of the risk of gastrointestinal bleeding
- Chlorphenamine maleate has antimuscarinic actions and should be used with care in conditions such as angle-closure glaucoma, urinary retention or pyloroduodenal obstruction.
- Phenylephrine hydrochloride should be avoided in phaeochromocytoma.
- Phenylephrine hydrochloride induces tachycardia or reflex bradycardia and should therefore be avoided in severe hyperthyroidism (see Section 4.3).
- Patients with diabetes mellitus or prostatic hyperplasia should also avoid phenylephrine as contained in CORENZA-C (see section 4.3).
- Cross-sensitivity to phenylephrine has been reported in patients hypersensitive to pseudoephedrine (see section 4.3).
- Porphyrria: Safety for use in porphyria has not been established
- Caution is required in patients with a history of hypertension and/or heart failure as fluid retention and oedema have been reported in association with CORENZA-C therapy. In view of the product's inherent potential to cause fluid retention, heart failure may be precipitated in some compromised patients
- *Elderly*: The elderly have an increased frequency of adverse reactions to NSAIDs, including CORENZA-C, especially gastrointestinal perforation, ulceration and bleeding (PUBs) which may be fatal.

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- The risk of gastrointestinal perforation, ulceration or bleeding (PUBs) is higher with increasing doses of CORENZA-C, in patients with a history of ulcers, and the elderly.
- When gastrointestinal bleeding or ulceration occurs in patients receiving CORENZA-C, treatment with CORENZA-C should be stopped.
- CORENZA-C should be given with caution to patients with a history of gastrointestinal disease (e.g. ulcerative colitis, Crohn's disease, hiatus hernia, gastro-oesophageal reflux disease, angiodysplasia) as the condition may be exacerbated.
- Serious skin reactions, some of them fatal, including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis have been reported.
- CORENZA-C should be discontinued at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity.
- Foetal Toxicity: Limit use of NSAIDs, including CORENZA-C, between 20 to 30 weeks of pregnancy due to the risk of oligohydramnios/foetal renal dysfunction.

Avoid use of NSAIDs in women around 30 weeks gestation and later in pregnancy due to the risks of oligohydramnios/foetal renal dysfunction and premature closure of the foetal ductus arteriosus.

- If NSAID treatment is necessary between 20 weeks and 30 weeks gestation, limit CORENZA-C use to the lowest effective dose and shortest duration possible.

Consider ultrasound monitoring of amniotic fluid if CORENZA-C treatment extends beyond 48 hours. Discontinue CORENZA-C, if oligohydramnios occurs and follow up according to clinical practice. (See section 4.6)

- Do not use for more than 10 days without consulting your doctor.
- Corticosteroids may increase the risk of gastrointestinal perforation, ulceration or bleeding (PUBs).
- Contains mannitol: May have a mild laxative effect.
- Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) has been reported in patients taking NSAIDs such as CORENZA-C. Some of these events have been fatal or life-threatening. DRESS typically, although not exclusively, presents with fever, rash, lymphadenopathy, and/or facial swelling. Other clinical manifestations may include hepatitis, nephritis, haematological abnormalities, myocarditis, or myositis. Sometimes symptoms of DRESS may resemble an acute viral infection. Eosinophilia is often present. Because this disorder is variable in its presentation, other organ systems not noted here may be involved. It is important to note that early manifestations

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of hypersensitivity, such as fever or lymphadenopathy, may be present even though rash is not evident. If such signs or symptoms are present, discontinue CORENZA-C and evaluate the patient immediately.

### 4.5 Interaction with other medicines and other forms of interaction

#### Interactions with other medicines

- *Vitamin C* may increase the absorption of *iron* in iron-deficiency states
- *Chlorphenamine maleate* may enhance the sedative effects of CNS depressants including *alcohol*, *barbiturates*, *hypnotics*, *opioid analgesics*, *anxiolytic sedatives* and *antipsychotics*.
- *Sedating antihistamines* have an additive antimuscarinic action with other antimuscarinic drugs, such as *atropine* and *some antidepressants*.
- *Sedating antihistamines* could also mask the warning signs of damage caused by ototoxic drugs such as *aminoglycoside antibacterials*.
- *Phenylephrine hydrochloride* may cause severe hypertension when used concurrently with *MAOIs*.
- Use of two or more *NSAIDs* concomitantly could result in an increase in side effects.
- *Corticosteroids* increase the risk of gastrointestinal perforation, ulceration or bleeding (PUBs).
- Anti-platelet medicines and selective serotonin reuptake inhibitors (SSRIs): increased risk of gastrointestinal bleeding.
- *Acetylsalicylic acid (aspirin)* may enhance the effects of coumarin anticoagulants (such as *warfarin*), *sulfonylurea hypoglycaemic drugs*, *zafirlukast*, *methotrexate*, *phenytoin* and *valproate*.
- *Acetylsalicylic acid (aspirin)* diminishes the effects of uricosurics such as *probenecid*.
- *Acetylsalicylic acid (aspirin)* may alter the efficacy of *mifepristone*.
- *Griseofulvin* might interfere with the absorption of *acetylsalicylic acid (aspirin)*
- *Acetylsalicylic acid (aspirin)* may reduce or abolish the hypotensive action of *ACE inhibitors*

#### Interactions with laboratory tests

- *Vitamin C* interferes with laboratory tests, falsely elevated or false- negative test results may be obtained from plasma, faeces or urine samples.

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### 4.6 Fertility, pregnancy and lactation

Safety in pregnancy and lactation have not been established.

Use of NSAIDs, including CORENZA-C, can cause premature closure of the foetal ductus arteriosus and foetal renal dysfunction leading to oligohydramnios and, in some cases, neonatal renal impairment.

Because of these risks, the use of CORENZA-C dose and duration between 20 and 30 weeks of gestation should be limited and avoided at around 30 weeks of gestation and later in pregnancy.

The onset of labour may be delayed and its duration increased.

Acetylsalicylic acid (aspirin) should be given with caution to breastfeeding mothers because of the risk of Reye's syndrome and metabolic acidosis in nursing infants.

### 4.7 Effects on ability to drive and use machines

CORENZA-C may lead to drowsiness and impaired concentration, which may be aggravated by the simultaneous intake of alcohol or other central nervous system depressant agents. Chlorphenamine maleate can cause CNS depression and the sedative effects can range from slight drowsiness to deep sleep. This can impair a person's ability to drive or operate machinery.

### 4.8 Undesirable effects

#### CORENZA-C

<b><i>System Organ Class</i></b>	<b><i>Frequency</i></b>	<b><i>Undesirable effect</i></b>
<b>Blood and lymphatic system disorders</b>	Frequent	slight blood loss
	Less frequent	agranulocytosis, leukopenia, thrombocytopenia, pancytopenia, aplastic anaemia and haemolytic anaemia
	Unknown	increases bleeding time, decreases platelet adhesiveness, hypoprothrombinaemia
<b>Immune system disorders</b>	Unknown	Hypersensitivity (including bronchospasm, angioedema and anaphylaxis)
<b>Endocrine disorders</b>	Unknown	hyperglycaemia
<b>Metabolism and nutrition disorders</b>	Frequent	anorexia
	Unknown	lactic acidosis

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<b>Psychiatric disorders</b>	Unknown	sleep disturbances, depression and confusion, anxiety, fear, restlessness, insomnia, irritability, psychotic states
<b>Nervous system disorders</b>	Frequent	headache, CNS depression varying from slight drowsiness to deep sleep and including lassitude, dizziness and incoordination (see sections 4.4 and 4.7)
	Unknown	headache, convulsions, paraesthesia, extrapyramidal effects, tremor, tinnitus and antimuscarinic effects such as dry mouth, thickened respiratory-tract secretions, blurred vision, urinary difficulty or retention, constipation and increased gastric reflux, Reye's syndrome
<b>Eye disorders</b>	Unknown	mydriasis
<b>Ear and labyrinth disorders</b>	Unknown	increase in intensity of ototoxicity with increasing salicylate dose
<b>Cardiac disorders</b>	Frequent	oedema, hypertension and cardiac failure
	Unknown	Palpitations, dysrhythmias. May induce tachycardia or reflex bradycardia
<b>Vascular disorders</b>	Unknown	hypotension. Excessive vasopressor response may cause a prolonged rise in blood pressure
<b>Respiratory, thoracic and mediastinal disorders</b>	Frequent	dyspnoea
<b>Gastrointestinal disorders</b>	Frequent	Peptic ulcers, perforation or gastrointestinal bleeding, sometimes fatal. Nausea, vomiting, diarrhoea, flatulence, constipation, dyspepsia, abdominal pain, melaena, haematemesis, ulcerative stomatitis, exacerbation of colitis and Crohn's disease, gastritis
	Less Frequent	epigastric pain
	Unknown	Large doses can cause gastrointestinal disturbances. Irritation of the gastric mucosa with erosion. Increased salivation
<b>Hepato-biliary disorders</b>	Unknown	hepatotoxicity
<b>Skin and subcutaneous tissue disorders</b>	Less Frequent	rashes
	Unknown	Bullous reactions, including Stevens-Johnson syndrome and

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		toxic epidermal necrolysis, piloerection, sweating and hair loss, Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS)
<b>Musculoskeletal and connective tissue disorders</b>	Unknown	myalgia
<b>Renal and urinary disorders</b>	Unknown	Large doses may result in hyperoxaluria and the formation of renal calcium oxalate calculi and should therefore be given with care to patients with hyperoxaluria. Difficulty in micturition, urinary retention.
<b>General disorders and administration site conditions</b>	Frequent	weakness
	Unknown	Tolerance may be induced with prolonged use of large doses, resulting in symptoms of deficiency when intake is reduced to normal

### Vitamin C (ascorbic acid)

<b><i>System Organ Class</i></b>	<b><i>Frequency</i></b>	<b><i>Undesirable effect</i></b>
<b>Gastrointestinal disorders</b>	Unknown	large doses can cause diarrhoea and other gastrointestinal disturbances
<b>Renal and urinary disorders</b>	Unknown	large doses may result in hyperoxaluria and the formation of renal calcium oxalate calculi and should therefore be given with care to patients with hyperoxaluria
<b>General disorders and administration site conditions</b>	Unknown	tolerance may be induced with prolonged use of large doses, resulting in symptoms of deficiency when intake is reduced to normal

### Chlorphenamine maleate

<b><i>System Organ Class</i></b>	<b><i>Frequency</i></b>	<b><i>Undesirable effect</i></b>
<b>Blood and the lymphatic system</b>	Less frequent	agranulocytosis, thrombocytopenia, leukopenia, pancytopenia, aplastic anaemia and haemolytic anaemia
<b>Immune system disorders</b>	Unknown	hypersensitivity (including bronchospasm, angioedema and anaphylaxis)
<b>Psychiatric disorders</b>	Unknown	Sleep disturbances, depression and confusion
<b>Nervous system disorders</b>	Frequent	headache, CNS depression varying from slight drowsiness to deep sleep and including lassitude,

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		dizziness and incoordination (see sections 4.4 and 4.7)
	Unknown	convulsions, paraesthesia, extrapyramidal effects, tremor, tinnitus and antimuscarinic effects such as dry mouth, thickened respiratory-tract secretions, blurred vision, urinary difficulty or retention, constipation and increased gastric reflux
<b>Cardiac disorders</b>	Unknown	Palpitations and arrhythmias
<b>Vascular disorders</b>	Unknown	hypotension
<b>Gastrointestinal disorders</b>	Less frequent	nausea, vomiting, diarrhoea or epigastric pain
<b>Skin and subcutaneous tissue disorders</b>	Less frequent	rashes
	Unknown	sweating and hair loss
<b>Musculoskeletal and connective tissue disorders</b>	Unknown	myalgia

### Acetylsalicylic acid (aspirin)

<i>System Organ Class</i>	<i>Frequency</i>	<i>Undesirable effect</i>
<b>Blood and the lymphatic system disorders</b>	Frequent	slight blood loss
	Unknown	increases bleeding time, decreases platelet adhesiveness, hypoprothrombinaemia, thrombocytopenia, aplastic anaemia, agranulocytosis, pancytopenia, haemolytic anaemia
<b>Immune system disorders</b>	Unknown	hypersensitivity
<b>Nervous system disorders</b>	Unknown	Reye's syndrome
<b>Ear and labyrinth disorders</b>	Unknown	increase in intensity of ototoxicity with increasing salicylate dose
<b>Cardiac disorders</b>	Frequent	oedema, hypertension and cardiac failure
<b>Gastrointestinal disorders</b>	Frequent	Peptic ulcers, perforation or gastrointestinal bleeding, sometimes fatal. Nausea, vomiting, diarrhoea, flatulence, constipation, dyspepsia, abdominal pain, melaena, haematemesis, ulcerative stomatitis, exacerbation of colitis and Crohn's disease, gastritis
	Unknown	irritation of the gastric mucosa with erosion, ulceration, haematemesis and melaena
<b>Hepatobiliary disorders</b>	Unknown	hepatotoxicity

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<b>Skin and subcutaneous tissue disorders</b>	Unknown	bullous reactions, including Stevens-Johnson syndrome and toxic epidermal necrolysis
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### Phenylephrine hydrochloride

<i>System Organ Class</i>	<i>Frequency</i>	<i>Undesirable effect</i>
<b>Endocrine disorders</b>	Unknown	hyperglycaemia
<b>Metabolism and nutrition disorders</b>	Frequent	anorexia
	Unknown	lactic acidosis
<b>Psychiatric disorders</b>	Unknown	anxiety, fear, restlessness, insomnia, confusion, irritability, psychotic states
<b>Nervous system disorders</b>	Unknown	headache
<b>Eye disorders</b>	Unknown	mydriasis
<b>Cardiac disorders</b>	Unknown	tachycardia or reflex bradycardia
<b>Vascular disorders</b>	Unknown	excessive vasopressor response may cause a prolonged rise in blood pressure
<b>Respiratory, thoracic and mediastinal disorders</b>	Frequent	dyspnoea
<b>Gastrointestinal disorders</b>	Frequent	nausea, vomiting
	Unknown	increased salivation
<b>Skin and subcutaneous tissue disorders</b>	Unknown	piloerection, sweating
<b>Renal and urinary disorders</b>	Unknown	difficulty in micturition, urinary retention
<b>General disorders and administration site conditions</b>	Unknown	weakness

### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Health care providers are asked to report any suspected adverse reactions to SAHPRA via the “6.04 Adverse Drug Reactions Reporting Form”, found online under SAHPRA’s publications: <https://www.sahpra.org.za/Publications/Index/8>.

You may also report to Adcock Ingram Limited using the following e-mail

address: [Adcock.AEReports@adcock.com](mailto:Adcock.AEReports@adcock.com)

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### 4.9 Overdose

#### **Acetylsalicylic acid (aspirin)**

Nausea, dizziness, vomiting, hyperventilation, fever, restlessness, ketosis, respiratory alkalosis, metabolic acidosis, mental clouding, irritation of gastric mucosa and resultant dyspepsia, haematemesis and melaena. Depression of the CNS may lead to coma; cardiovascular collapse and respiratory failure may also occur. In acute salicylate overdosage, an oral dose of activated charcoal is recommended if the patient is suspected of ingesting more than 125 mg/kg of salicylate. Activated charcoal prevents the absorption of any salicylate remaining in the stomach and aids the elimination of any salicylate that has been absorbed.

Forced diuresis by intravenous infusions of saline with sodium bicarbonate or of compound lactate injection or dextrose solution, should be considered. Fluid and electrolyte management is essential to correct acidosis, hyperpyrexia, hypokalaemia, and dehydration. In patients with acute allergic reactions to aspirin (acetylsalicylic acid), epinephrine (adrenaline) and corticosteroids followed by an antihistamine should be given. Respiratory failure to be treated by artificial respiration or respiratory stimulants.

#### **Phenylephrine hydrochloride**

Overdosage may result in nausea, vomiting, hyperglycaemia, anorexia, lactic acidosis, headaches, anxiety, fear, restlessness, insomnia, confusion, irritability, mydriasis, tachycardia, reflex bradycardia, high blood pressure, increased salivation, sweating difficulty in micturition, urinary retention and general weakness.

Treatment is symptomatic and supportive (see section 4.8).

#### **Vitamin C**

Large doses are reported to cause diarrhoea and other gastrointestinal disturbances, hyperoxaluria and tolerance may be induced. Large doses can also cause formation of kidney stones. Treatment is symptomatic and supportive.

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### Chlorphenamine Maleate

Overdosage with sedating antihistamines is associated with antimuscarinic, extrapyramidal, and CNS effects. When CNS stimulation predominates over CNS depression, which is more likely in children or the elderly, it causes ataxia, excitement, tremors, psychoses, hallucinations, and convulsions; hyperpyrexia may also occur. Deepening coma and cardiorespiratory collapse may follow. In adults, CNS depression is more common with drowsiness, coma, and convulsions, progressing to respiratory failure and cardiovascular collapse.

Treatment is symptomatic and supportive.

## 5. PHARMACOLOGICAL PROPERTIES

A 5.8 Preparations for common cold, including nasal decongestant and antihistaminic.

WHO ATCC Code: R05 COUGH AND COLD PREPARATIONS

### 5.1 Pharmacodynamics properties

CORENZA-C combines the nasal decongestant action of phenylephrine HCl, the antihistaminic effect of chlorphenamine maleate and the anti-pyretic, analgesic and anti-inflammatory actions of acetylsalicylic acid (aspirin).

**Phenylephrine** is a  $\alpha_1$ -selective agonist.

**Chlorphenamine maleate** is a potent H<sub>1</sub> antagonist and reduces the major actions of histamine in the body by competitive, reversible blockade of histamine H<sub>1</sub>-receptor sites on tissues.

**Acetylsalicylic acid (aspirin)** inhibits the enzyme cyclooxygenase, which results in the direct inhibition of the biosynthesis of prostaglandins and thromboxanes from arachidonic acid.

**Moroxydine hydrochloride** has anti-viral activity.

**Ascorbic acid (vitamin C)** is essential for the synthesis of collagen and intercellular material. It also has a beneficial effect in the common cold

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### 5.2 Pharmacokinetic properties

**Chlorphenamine maleate** is absorbed slowly from the gastrointestinal tract and is widely distributed in the body. It enters the CNS and about 70% of chlorphenamine in the circulation is bound to plasma proteins. It is extensively metabolised and the unchanged drug and metabolites are excreted mainly in the urine.

**Phenylephrine hydrochloride** has low oral bioavailability due to irregular absorption and first pass metabolism by monoamine oxidase in the gut and liver.

**Acetylsalicylic acid (aspirin)** is absorbed rapidly from the gastrointestinal tract. Once absorbed, it is converted to salicylate. Salicylate is extensively bound to plasma proteins and is rapidly distributed to all body parts. Salicylate is mainly eliminated by hepatic metabolism. Salicylate is also excreted unchanged in the urine.

**Vitamin C (ascorbic acid)** is readily absorbed from the gastrointestinal tract and is widely distributed in the body tissues. Vitamin C is reversibly oxidised to dehydroascorbic acid, some is metabolised to ascorbate-2-sulfate, which is inactive, and oxalic acid which are excreted in the urine. Vitamin C in excess of the body's needs is rapidly eliminated unchanged in the urine.

### 5.3 Preclinical safety data

No data available.

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

- Citric Acid anhydrous [E330]
- Docusate sodium
- Mannitol
- Polyvidone 30 oral
- Purified water
- Sodium bicarbonate [E500]
- Sodium carbonate anhydrous

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- Sodium citrate [E331]
- Sodium saccharin [E954]

### 6.2 Incompatibilities

No information available.

### 6.3 Shelf life

Three years.

### 6.4 Special precautions for storage

Store in a cool place at or below 25 °C. Protect from moisture.

### 6.5 Nature and contents of container

Aluminium tubes of 10 and 20 tablets.

### 6.6 Special precautions for disposal

Not applicable.

## 7. HOLDER OF THE CERTIFICATE OF REGISTRATION

### Adcock Ingram Limited

1 New Road

Erand Gardens

Midrand, 1685

Customer Care: 0860 ADCOCK / 232625

## 8. REGISTRATION NUMBER

C661 (Act 101/1965)

## PROFESSIONAL INFORMATION

### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of registration: 18 September 1970

### 10. DATE OF REVISION OF THE TEXT

03 June 2024

Namibia: NS1 14/5.8/0391
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Botswana: S3 B9323175
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