CARBology® MAN

Reg. No. B3716 Act No. 36 of 1947

Reg. No. N-F 0430 Act No. 36 of 1947

FERTILIZER GROUP 2

READ LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

CARBOLOGY MAN is a manganese containing liquid fertilizer for use as a foliar feed to maintain or correct manganese deficiencies in plants.



DANGER

Magnanese (Mn) 80 g/kg (110 g/l)

Amino gluconate chelated

SG (@20 °C) = 1,36 ± 0,02

HAZARD STATEMENTS:

May intensify fire; oxidiser. Harmful if swallowed. Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

PRECAUTIONARY STATEMENTS:

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Wash affected areas thoroughly after handling. Do not touch eyes.

Registration holder: Rolfes Agri (Pty) Ltd. (Reg. No. 1998/013411/07) • 288 Mundt Street, Waltloo, 0184 Gauteng, RSA. • Tel: (012) 803-0145

Emergency contact details

Office Hour Poisoning Helpline Rolfes Agri (Pty) Ltd. Tel: +27 (12) 803 0145 Distributed by: INTELIGRO (Pty) Ltd. PO Box 85, Wellington, 7654 Tel:+27 (21) 873 6177



FERTILIZER

Spill Response and Transport incidents

Spill Tech, Oil and chemical pollution control Tel: +27 (86) 100 0366 / +27 (83) 253 6618 www.spilltech.co.za



PRECAUTIONS:

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read carefully and follow all instructions.
- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Keep away from clothing and other combustible materials.
- Wear protective gloves, protective clothing, eye protection & face protection.
- Wash affected area thoroughly after handling.
- Do not eat, drink, or smoke when using this product.
- Do not breathe fume/gas/mist/vapours/spray.
- Avoid breathing fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- In case of fire: Use suitable material to extinguish.
- IF SWALLOWED: Get medical help.
- IF ON SKIN: Immediately rinse with water for serveral minutes.
- Wash contaminated clothing before reuse.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if
 present and easy to do. Continue rinsing.
- Get emergency medical help immediately.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomting.
- Get medical help if you feel unwell.

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler.

RELEVANT SUBSTANCES:

Manganese Nitrate 10 - 30% and Ammonia solution < 10%.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED.

Do not apply CARBOLOGY MAN:

- In combination with copper containing fungicides, phosphates or phosphonates.
- Within 30 days after application of any copper fungicides.
- In combination with highly alkaline material such as lime sulphur, Bordeaux mixture or certain Boron products.

CARBOLOGY MAN should preferably be applied in the early morning or late afternoon. Do not apply to plants that are undergoing a period of moisture or heat stress.

CARBOLOGY MAN could lower the pH of the spray water, therefore the use of a buffer is recommended when using in combination with other chemicals.

RECOMMENDATIONS:

Please ensure not to exceed the maximum rate per hectare. Do not exceed 2% (2ℓ / 100 ℓ water) if mixed with other chemicals in a spray tank.

CROP	MAX RATE/HA PER Application	RATE PER 100 ℓ WATER	REMARKS
Beans, Groundnuts, Peas, Soy-, Green and Dry Beans	2 ℓ	50 – 300 m ℓ	Apply $1-2$ applications early in the growing season in 200 $-$ 500 $\boldsymbol{\ell}$ / ha water.
Cereals (Canola, Barley, Oats, Wheat)	2 ℓ	50 – 300 m ℓ	Apply early in the season at the first signs of deficiency and repeat the application if required. Apply in 50 $-$ 300 ℓ / ha water.
Deciduous Fruit (Pome and Stone Fruit)	10 ℓ	70 – 300 m ℓ	Apply first application at second green-tip spray and repeat $2-3$ times from 100 % petal drop with $10-14$ days intervals. Repeat after harvest. Apply in 1 000 -3 000 ℓ / ha water or according to the Tree Row Volume.
Grapes	5ℓ	70 – 300 m ℓ	Apply first application at $10-15~{\rm cm}$ shoot length and repeat $2-3$ times during the growing season. Apply in $500-1~000~{\rm J/ha}$ water.
Persimmons	5ℓ	70 – 300 m ℓ	Apply first application at $10 - 15$ cm shoot length and repeat $2 - 3$ times during the growing season. Apply in $500 - 1\ 000\ \ell$ / ha water.
Row Crops Maize and Sweet Corn	5ℓ	100 – 500 m ℓ	Start application early in the season at the first signs of a deficiency and repeat if required. Apply in 200 $-$ 500 ℓ / ha water.
Cotton	28	50 – 300 m ł	Apply first application early in the season and repeat if required. Apply in 500 ℓ / ha water.
Subtropical Fruit Citrus	10 ℓ	50 – 300 m ℓ	Apply as a full cover spray in spring to all new growth. Repeat $1-2$ times. Do not spray directly or during harvest. Apply in $1\ 000-3\ 000\ \ell$ / ha water.
Mangoes	10ℓ	70 – 300 m ℓ	Apply as a full cover spray in the spring and repeat the application in the summer if required. Apply in 3 000 – 4000 ℓ / ha water.
Avocados	10 ℓ	70 – 300 m ł	Start application on flowers in the spring. Repeat $1-2$ times on all new growth in the summer. Apply in $1\ 000-3\ 000\ \ell$ / ha water.

CROP	MAX RATE/HA PER Application	RATE PER 100 ℓ WATER	REMARKS
Tea	2 8	50 – 300 m ℓ	Apply early in the season on new growth. Apply $3-4$ applications depending on severity of deficiency. Apply in 200 $-$ 600 ℓ / ha water.
Tree Nuts (Macadamias, Pecans and other Nuts)	15ℓ		Start application in the spring and repeat on all new growth later in summer or when deficiencies occur. Repeat $1-2$ times if necessary. Apply in $1\ 000-4\ 000\ \ell$ / ha water.
Vegetables Brassicas, Bulb vegetables, Capsicums, Cruciferae, Cucurbits, Root- and Tuber vegetables, Tomato, etc.	2 ℓ		Apply at the first signs of a manganese deficiency and repeat 3 $-$ 4 weeks later if necessary. Apply in 300 $-$ 500 ℓ / ha water.
Lettuce	2 ℓ	50 – 300 m ł	Apply $1-2$ applications early in the growing season in 500 ℓ / ha water.

For optimum results **CARBOLOGY® MAN** should be used in a program and in combination with other balanced fertilizers and foliar feeds. Use lower rates as a maintenance spray and higher rates to correct deficiencies. Consult with your chemical distributor should specific programs or any other information be required regarding the use of **CARBOLOGY® MAN**.