

FLO-BOR[®]

Reg. No. B2531, Act No. 36 of 1947
Botswana Reg. No. W1301521, Act 18 of 1999

FERTILIZER GROUP 2

Polyborate Solution

FLO-BOR is a solution containing boron for use either as a foliar spray or as a soil treatment.

ACTIVE INGREDIENT:

Boron (B)98 g/kg (129 g /ℓ)



DANGER

GHS HAZARD STATEMENT

Causes skin irritation.

Causes serious eye irritation.

May damage fertility and the unborn child.

GHS PRECAUTIONARY STATEMENT

Wear protective gloves, protective clothing, eye protection and face protection.

Wash hands and face thoroughly after handling



REGISTRATION HOLDER

Nulandis[®] (A division of AECI Ltd)

Reg. No. 1924/002590/06

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CONTENTS:

BATCH NO:

DATE OF MANUFACTURE:

UN No. / VN Nr. 3267

WARNINGS:

GHS HAZARD STATEMENT

Causes skin irritation.
Causes serious eye irritation.
May damage fertility and the unborn child.

PRECAUTIONS:

GHS PRECAUTIONARY STATEMENT

Prevention

Obtain, read and follow all safety instructions before use. Wear protective gloves, protective clothing, eye protection and face protection.

Wash hands and face thoroughly after handling.

Do not touch eyes.

Response

If exposed or concerned, get medical advice.

Specific treatment – see Section 4 of this SDS.

IF ON SKIN: Wash with plenty of water under the safety shower. If skin irritation occurs: Get medical help.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present, and easy to do. Continue rinsing. If eye irritation persists, get medical help.

Take off contaminated clothing and wash it before reuse.

Storage

Store locked up.

Disposal

Dispose of content or container to a licenced hazardous waste facility in accordance with local and national regulations.

RELEVANT SUBSTANCES:

Substance name (IUPAC)	Concentration % By weight	Classification
Boric Acid	30 - 40%	Reproductive toxicity (Category 1B) H360 FD.
Monoethanol Borate (2-Aminoethoxyboronic acid)	20 – 30%	Skin Corrosion/Irritation (Category 2) H315. Serious Eye Damage/Irritation (Category 2) H319.

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **FLO-BOR** and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

APPLICATION INSTRUCTIONS:

FOLIAR APPLICATION:

Ensure the spray of water used is sufficient to provide a full cover of the plant surface. Do not exceed a concentration of 0.75% v/v in field crops and 0.3% v/v in flowers and ornamentals (0.15% v/v in Gladioli).

SOIL APPLICATION:

Apply in sufficient water to obtain an even coverage. For optimal uptake by the plant, the boron must be moved into the root zone by rainfall, incorporation or irrigation. Do not allow **FLO-BOR** to come into direct contact with the seed.

COMPATIBILITY:

FLO-BOR is compatible with most commonly used foliar feeds. However, it is recommended to do a compatibility test on a small area and observe the treated area for 3 days before doing commercial applications.

FLO-BOR is not compatible with Zinc sulphate, Manganese sulphate, Lime Sulphur or miscible oil formulations.

APPLICATION TABLE:

CROP	DOSAGE	APPLICATION METHOD
APPLES, PEARS, APRICOTS, PLUMS, PEACHES, CHERRIES	100 ml/100 ℓ water or 2 ℓ/ha	Apply 2 treatments: a) At 30% blossoming b) Post harvest in autumn
GRAPES	100 ml/100 ℓ water/ha 200 ml/100 ℓ water/ha	Apply 2 treatments: a) Just before flowering stage b) Post harvest treatment
CITRUS	Maximum of 50 ml per tree	Spread evenly in the drip zone of trees. Do not repeat within 3 years after treatment and do not treat young trees.
	200 ml/100 ℓ water	Do not apply more than once a year as a full cover spray. Use in 1000 - 2000 ℓ water/ha.
POTATOES, GROUNDNUTS AND OTHER CROPS	350 ml/ha	Apply 4 - 5 times per season at 3 week intervals as either an aerial or tractor application. During the following years only 2 treatments per season should be applied.
ONIONS	750 ml/ha	Apply the first treatment 3 weeks after plants have established and repeat 3 weeks later.
SUNFLOWERS, CAULIFLOWER, OTHER COLE CROPS AND TOMATOES	750 ml/ha	Apply as a full cover foliar spray when required. Repeat after new leaves have formed. If necessary, apply a third spray.
COTTON	375 – 750 ml/ha	Apply as a full cover spray during the flowering stage where boron deficiency has been identified.
TOBACCO	350 – 750 ml/ha	Apply 4 - 5 times per season with 3 weekly intervals. Apply as an aerial or tractor application.
AVOCADOS	50 – 150 ml/100 ℓ water maximum 2.5 ℓ / ha	Apply as a full cover spray to maintain boron levels. Repeat after harvest.
MACADAMIAS	50 - 150 ml/100 ℓ water/ha	Apply as a full cover spray to maintain boron levels.
LUCERNE 0 - 15% clay 16 - 30% clay + 31% clay 0 - 15% clay 16 - 30% clay + 31% clay	500 ml/ha 1 000 ml/ha 1 500 ml/ha	A) Maintenance Treatment: Apply as an overall spray treatment 10 days after each cutting.
	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maximum (incorporated into the soil to a depth of 10-15 cm)	B) Corrective Treatment: Apply a single application as an overall spray directly after cutting when analysis of top 15 cm of plant contains less than 20 mg boron/kg (20 ppm) before flowering. Boron levels can then be re-analysed and adjusted if necessary, based on soil analysis
FLOWERS AND ORNAMENTALS	100-150 ml/100 ℓ water	Apply 2 - 3 sprays at monthly intervals, starting as soon as plants have established.

PRE-PLANT SOIL APPLICATION

MAIZE 0-15% clay 16-30% clay +31% clay	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maximum (incorporated into the soil to a depth of 10-15 cm)	Spray evenly over the soil before final planting preparation, except where leaf analysis of the previous crop may allow omission of treatment.
SUNFLOWERS 0-15% clay 16-30% clay +31% clay	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maximum (incorporated into the soil to a depth of 10-15 cm)	Where sunflowers are to be grown, spray soil evenly before final preparations. Where leaf analysis of previous crop allows, treatment may be omitted.

IMPORTANT: BEFORE APPLYING FLO-BOR CONSULT A QUALIFIED AGRONOMIST OR AN AGRICULTURAL ADVISER ON THE NECESSITY OF USING IT.

FLO-BOR®

Reg. Nr. B2531, Wet Nr 36 van 1947

Oplossing van Poliboraat

MISSTOF GROEP 2

FLO-BOR is 'n boorbevattende oplossing wat óf as 'n blaarbespuiting óf 'n grondbehandeling toegedien kan word.

AKTIEWE BESTANDDEEL:

Boor (B) 98 g/kg (129 g/ℓ)

INHOUD:

LOTNOMMER:

DATUM VAN VERVAARDIGING:

VN Nr.: 3265 CORROSIVE LIQUID, BASIC, ORGANIC N.O.S.



REGISTRASIEHOUER:

Nulandis® ('n Afdeling van AECl Beperk)

Reg. Nr. 1924/002590/06

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FLO-BOR® is die geregistreerde handelsmerk van AECl Beperk (Nulandis® 'n Afdeling van AECl Beperk)

TOEDIENINGSINSTRUKSIES:

BLAARBESPUITING:

Die hoeveelheid water wat toegedien word, moet voldoende wees om 'n goeie bedekking van die plantoppervlakte te gee. Moenie 'n konsentrasie van meer as 0.75% v/v op gewasse en 0.3% v/v op blomme en sierplante (0.15% v/v vir swaardlelie) oorskry nie.

GRONDTOEDIENING:

Om egalige bedekking te kry, moet 'n genoegsame hoeveelheid water gebruik word. Vir optimale plantopname moet die boor die wortelsone bereik met behulp van reën, besproeiing of 'n grondbewerkingspraktyk.

VERENIGBAARHEID:

FLO-BOR is verenigbaar met die mees algemene gebruikte blaarvoedings. Dit word egter aanbeveel dat 'n toets op 'n klein area gedoen word en dan nagegaan word vir 3 dae, voordat enige kommersiële toedienings gedoen word. **FLO-BOR** is nie verenigbaar met Sinksulfaat, Mangaansulfaat, Kalkswael of mengbare olie- formulasies nie.

TOEDIENINGSTABEL:

GEWAS	DOSIS	TOEDIENINGSMETODE
APPELS, PERE, APPELKOSE, PERSKES, PRUIME, KERSIES	100 ml/100 ℓ water of 2 ℓ/ha	Dien twee behandelings toe: a) Tydens 30% blom. b) Na-oes in die herfs.
DRUIWE	100 ml/100 ℓ water/ha 200 ml/100 ℓ water/ha	Dien twee behandelings toe: a) Net vóór blomstadium. b) Na-oes behandeling
SITRUS	Maksimum van 50 ml/boom	Versprei egalig in die drupsone van bome en moenie binne drie jaar na behandeling herhaal óf op jong bome toedien nie.
	200 ml/100 ℓ water	Moenie meer as een keer per jaar as 'n voldekbepuiting toedien nie. Gebruik in 1000 - 2000 ℓ water/ha.
AARTAPPELS, GRONDBONE EN ANDER GEWASSE	350 ml/ha	Dien 4 - 5 keer per seisoen toe met tussenposes van 3 weke as óf 'n lug- óf trekkerbespuiting. Gedurende die volgende jare moet slegs twee bespuitings per seisoen toegedien word.
UIE	750 ml/ha	Dien die eerste bespuiting 3 weke na vestiging van plante toe en herhaal 3 weke later.
SONNEBLOMME, BLOMKOOL, ANDER KOOLGEWASSE EN TAMATIES	750 ml/ha	Dien toe as 'n voldekbepuiting sodra benodig word. Herhaal nadat nuwe blare ontwikkel het. Indien nodig, dien 'n derde bespuiting toe.
TABAK	350 - 750 ml/ha	Dien 4 - 5 keer per seisoen toe met tussenposes van 3 weke, as óf 'n lug- óf trekkerbespuiting.
AVOKADO'S	50 - 150 ml/100 ℓ water maximum 2.5 ℓ / ha	Dien toe as 'n voldekbepuiting, vir die instandhouding van boorvlakke. Herhaal na oes.
MAKADAMIA'S	50 - 150 ml/100 ℓ water/ha	Dien toe as 'n voldekbepuiting, vir die instandhouding van boorvlakke.
KATOEN	375 - 750 ml/ha	Dien toe as 'n voldekbepuiting wanneer boortekort gedurende blomstadium geïdentifiseer word.
LUSERN 0-15% klei 16-30% klei +31% klei	500 ml/ha 1 000 ml/ha 1 500 ml/ha	A) Onderhoudsbehandeling: Dien toe as 'n algehele bespuiting 10 dae na elke snyfel.
	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maksimum (inkorporeer tot 'n diepte van 10-15 cm)	B) Korrektiewe Behandeling: Dien 'n enkel toediening toe as 'n algehele bespuiting na sny sodra die ontleding van die boonste 15 cm van die plant vóór blom, minder as 20 mg boor/kg (20 dpm) aandui. Die boorvlakke kan dan weer ge-analiseer en aangepas word indien nodig, gebaseer op die grondanalise.
BLOMME EN SIERPLANTE	100 - 150 ml/100 ℓ water	Dien 2-3 bespuitings met maandelikes tussenposes toe, beginnende sodra die plante gevestig is.

VOOR-PLANT GRONDTOEDIENING

MIELIES 0-15% klei 16-30% klei +31%klei	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maksimum (inkorporeer tot 'n diepte van 10-15 cm)	Spuit voor finale grondvoorbereidings eweredig oor die grond tensy blaarentledings van die vorige oes 'n toediening onnodig laat blyk.
SONNEBLOMME 0-15% klei 16-30% klei +31% klei	5 ℓ/ha 6 ℓ/ha 7.75 ℓ/ha maksimum (inkorporeer tot 'n diepte van 10-15 cm)	Waar sonneblomaanplantings beplan word, doen 'n egalige grondbespuiting vóór finale voorbereiding. Waar blaarentledings van die vorige oes dit toelaat, mag behandelings onnodig wees.

**BELANGRIK: RAADPLEEG 'N GEKWALIFISEERDE AGRONOM OF LANDBOUKUNDIGE ADVISEUR
VOORDAT FLO-BOR TOEGEDIEN WORD, OOR DIE NOODSAAKLIKHEID VAN DIE
GEBRUIK DAARVAN.**