FIXOR

SOLUBLE CONCENTRATE (SL) BASED ON 100 G/L (9.67% W/W) 1-NAPHTHYLACETIC ACID

DANGER

Plant growth regulator in apple

MAPP17428 / PCS 05252

SAFETY INFORMATION

Hazard statements

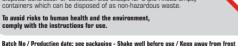
Causes serious eve damage. Suspected of damaging the unborn child.

Precautionary statements

Wear protective gloves/protective clothing/eye protection.
IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: get medical advice/attention. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste

To avoid risks to human health and the environment.





MAPP 17428 / PCS 05252

Batch No / Production date: see packaging - Shake well before use / Keep away from frost See attached leaflet for 'Directions for Use'.

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL PLANT GROWTH REGULATOR

	Maximum individual dose: (I product/ha)		Maximum number of treatments: (per year)	
Apple	0.15	-	1 for fruit thinning	BBCH 71

Specific use: fruit thinning

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

SAFETY PRECAUTIONS - UK only

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work. Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible). AFTER CONTACT WITH SKIN, WASH IMMEDIATELY with plenty of water DO NOT BREATHE SPRAY

SHAKE CONTAINER WELL BEFORE LISE.

Environmental protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

Storage and disposal
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. WASH OUT CONTAINER THROUGHLY and dispose of safely. DO NOT RE-USE CONTAINER for any other purpose

Fixor

This leaflet is part of the approved product label.

DIRECTIONS FOR USE

IMPORTANT: This information is authorised as part of the product label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

CROP SPECIFIC INFORMATION

The product is a <u>fruit thinner in apple trees</u>. One application should be made when the fruits have a fruit diameter between § and 12 mm (BBCH 71).

Dose rate: Max 150 mL product/ha in 1000L water

We particularly draw the attention to the fact that thinning results depend on a number of external factors such as sensitivity of specific crop varieties to chemical thinning, as well as varietal tendencies for biennial bearing and the production of small sized fruit. Other important factors are weather conditions at the time of the application and the period immediately following, as well as the flowering, pollination and the overall vigour of the tree.

REMARKS

Adapt the spray volume to the tree size and canopy density to ensure a thorough fruit and leaf coverage

MIXING AND SPRAYING

Before use ensure that all application equipment is clean. Add half the required volume of water and start agitation, add the required quantity of the product. Fill the tank to the required volume whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete.

Thoroughly wash all spray and measuring equipment with water immediately after use.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Control of Plant Protection Product Regulations 1995 or Regulation (FC) No. 1107/2009

CONDITIONS OF SUPPLY

The magufacturer/seller/registration holder only guarantees that the supplied product complies with the quality standards in force. The manufacturer/seller/registration holder cannot be held liable neither for results nor for any damage due to the storage, transport or application of the product.

SAFETY DATA SHEET

FIXOR SDS SDS v_UK+IE_O_O Belcrop Eng

Fixor

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

1.4 Product identifier

Name of the substance: Fixor Code: MAPP17428 / PCS 05252 Formulation type: SL (soluble concentrate) Concentration: 100 g/L (9.67% w/w)

Active substance: 1-naphthylacetic acid (1-NAA)
IUPAC-name: 1-naphthylacetic acid
Identification number: EG 201-705-8

RRN:No registration number is available for this substance, in accordance with the provisions of Article 15 of Regulation (EC) No 1907/2006

1.2 Relevant identified uses of the substance or mixture and uses advised against identified uses: plant growth regulator for professional use

1.3 Details of the supplier of the safety data sheet



Belcrop NV Tiensestraat 300 3400 Landen Belgium

Tel.: +32 11 59 83 60 Fax: +32 11 59 83 61

Direct contact person:
John Hudson
21 Victoria Road
Wargrave
Berkshire RG10 8AD
United Kingdom
Direct telephone number +44 118 940 4264
or +44 7860 137 600
Email: info@blefron.be

1.4 Emergency telephone number

Please call the local emergency number Emergency number in Belgium (24h/24, 7d/7): +32 11 69 79 80

Section 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Eye Dam. 1, Repr. 2 H318, H361d

Classification according to Directive 67/548/EEC or 1999/45/EC

n, Xi., Repr. Cat. 3 41, R63, R52/53

For full text of R-phrases and/or Hazard-statements see section 16.

2.2 Label elements

Label in accordance with Regulation (EC) No 1272/2008

Hazard pictogram





Signal word Danger

hazard statement

H318: Causes serious eye damage.

H361d: Suspected of damaging the unborn child.

EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

precautionary statement

P280: Wear protective gloves/protective clothing/eve protection.

P305 + P351 + P338: ÎF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313: IF exposed or concerned: Get medical advice/attention.

P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

The active substance does not fulfill the criteria of a persistent, bioaccumulative and toxic (PBT) substance, nor of a very persistent and very bioaccumulative (vPvB) substance, as outlined in Annex XIII of Regulation (EC) No 1907/2006

3.2 Mixtures

Name Identification number	RRN	% (% by weight)	Classification according to Regulation (EC) No 1272/2008
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1-naphthylacetic acid (1-NAA)	EG 201-705-8	not available	100 g/L (9.67% w/w)	Acute Tox. 4, Eye Dam. 1 , Repr. 2 H302, H318, H361d
Sodium hydroxide	EG 215-185-5	01-2119457892-27	< 2.5% w/w	Met. Corr. 1, Skin Corr. 1A H290, H314

r full text of Hazard-statements see section 16.

Section 4: First aid measures

4.1 Description of first aid measures

If INHALED

Presh air, rest. In case of symptoms, seek medical attention and show the label or packaging.
In case of contact with SKIN:

Rinse the skin with plenty of water or take a shower for 15 minutes. Meanwhile, remove contaminated clothing and shoes. In case of symptoms, seek medical attention and show the label or packaging.

In case of contact with EYES:

Rinse thoroughly with water for 10 minutes. Rinse AWAY from the non-affected eye. If wearing contact lenses: if easy to remove, first remove the lenses, then rinse. Consult immediately an oculist and show the label or packaging. If SWALLOWED:

Rinse the mouth. Call the poison center and ask whether drinking of a solution of activated charcoal in water is recommended. Consult a doctor immediately and show the label or packaging.

4.2 Most important symptoms and effects, both acute and delayed

No data available in humans.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:

Prehospital: symptomatic treatment.

Contact the local poison center (see section 1.4) for further treatment in the hospital.

Section 5 : Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media: chemical powder, water spray, CO2, polyvalent foam,

Unsuitable extinguishing media: Water with full jet

5.2 Special hazards arising from the substance or mixture

The product contains flammable organic substances. In case of a fire, a thick black smoke containing hazardous products of combustion will be generated (see section 10).

Exposure to decomposition products can be harmful to one's health.

5.3 Advice for fire-fighters

Self-contained breathing apparatus and full protective clothing (boots, overall, gloves, eye and face protection) discharge of extinguish water into sewer or watercourse.

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures See section 8

6.2 Environmental precautions

Prevent the product from entering into soil, sewers, surface or ground water. If necessary, isolate the contaminated area First remove spillage and accidental leaks (see section 6.3). Then rinse the contaminated area with water. Do not allow residues to enter into sewer and surface water. Dispose contaminated water according to local legislation. Inform the authorities if product pollutes the environment.

6.3 Methods and material for containment and cleaning up

6.3.1 Containment of a spill

If applicable, cover spillage with absorbing material (sand, clay, diatomite, universal binders, absorbing grain),

6.3.2 Clean-up of a spill

Spills shall be contained by means of absorbent material and a shovel. The collected products shall be disposed of in re-usable barrels or barrels for waste removal. As soon as the substance has been removed, thoroughly clean up the floor and any object that has been in contact with the substance in compliance with the environmental prescriptions.

6.3.3 Additional information No additional information

6.4 Reference to other sections

See section 1 contact information

See section 7 for handling and storage

See section 8 for exposure controls/ personal protection

See section 43 for disposal considerations

Section 7 : Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective measurements

Work under local exhaust/ventilation. Observe normal industrial and hygiene standards. Wear personnel protective clothing. Avoid contact with skin and eyes. Avoid forming of aerosol or dust. Wash hands after use. Do not discharge product into sewer. Keep away from source of ignition.

7.1.2 Advice on general occupational hygiene

When using, do not eat, drink or smoke, Clean used material. Wash hands after each use,

Wash contaminated clothing after use. Remove contaminated clothing and protective equipment before entering eating

7.2 Conditions for safe storage, including any incompatibilities

Store in closed packaging in a dry, well ventilated area. Store in original packaging. Keep away from food, drink and animal

feeding stuffs. Keep out of reach of children. See also section 10.

7.3 Specific end use(s)

See section 1.2.

Section 8 : Exposure controls/personal protection

8.1 Control parameters

8.1.1 Occupational exposure limit values

Sodium hydroxide:

Limit value (short term): 2 mg/m3

8.1.2 Information on currently recommended monitoring procedures Not known

8.2 Exposure controls

8.2.1 Appropriate engineering controls

See section 7 and 8.1.1.

8.2.2 Individual protection measures, such as personal protective equipment

8.2.2.1 Eye / face protection

Wear safety goggles, with side-protection.

8.2.2.2 Skin protection

8.2.2.2.1 Hand protection

Wear chemical protective gloves (EN374).

8.2.2.2.2 other

Wear suitable work clothes. (Coverall with full body protection)

8.2.2.3 Respiratory protection

Use always in a well ventilated area.

Only if applicable:

Gas, vapours: gas filter: semi-facial mask with ABEK filter.

Dust, mist, fumes: dust mask: P2FFP2

8.2.3 Environmental exposure controls

See section 6: Accidental release measures See section 7: storage and handling See section 13: Disposal considerations

Section 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

	a, i shio-matton on sasie physical and chemical properties					
`	✓ x ⊘	Endpoint (unit)				
7	a) Appearance	transparant liquid				
	b) Odeur	no discernible odour				
'n	c) Odour threshold	not relevant				
)	d) pH	7.0 - 7.2 (1% solution) 7.8 - 8.0 (neat formulation)				
	e) Melting point/freezing point	< 0 °C (lowest tested temperature)				
	f) Initial boiling point and boiling range	no data available				
	g) Flash point	> 100 °C				
	h) Evaporation rate	no data available				

i) Flammability (solid, gas)	not relevant	
j) Upper/lower flammability or explosive limits	not applicable	
k) Vapour pressure	no data available	
I) Vapour density	no data available	
m) Relative density	1.03 g/ml	
n) Solubility(ies)	the composition remains stable under dilute conditions	
o) Partition coefficient: n-octanol/water	log Pow = 2.24 @ pH3; -0.02 @ pH7; 0.32 @ pH 9 (active substance (technical))	
p) Auto-ignition temperature	not relevant	
q) Decomposition temperature	not relevant	
r) Viscosity	2.70 - 3.75 mPa.s @ 20°C	
s) Explosive properties	not explosive	
t) Oxidising properties.	no oxidising properties	

9.2 Other information

No additional information

Section 10 : Stability and reactivity

10.1 Reactivity

Stable under normal conditions of handling and storage.

10.2 Chemical stability

Stable under normal environmental temperatures (between 0°C and 40°C). See also section 7.2. **10.3 Possibility of hazardous reactions**

No specific data known.

10.4 Conditions to avoid

No specific data known.

10.5 Incompatible materials

No specific data known.

10.6 Hazardous decomposition products

Combustion or thermal decomposition produces toxic and irritating vapours. See section 5.2

Section 11 : Toxicological information

11.1 Information on toxicological effects

	endpoint	duration	species	tested on
a) acute toxicity	oral: LD50 = 933 mg/kg bw/day (LD50 = 762 mg/kg bw/day in terms of 1-NAA (acid form))	single dose	rat	1-NAA-Na

	endpoint	duration	species	tested on
	dermal: LD50 > 2000 mg/kg bw	24h exposure	rat	active substance (technical)
	inhalation: The acute inhalation of 1-NAA was investigated at the limit concentration of 0.45 mg/l. No death occurred at this dose> LC50 > 0.45 mg/l - 1-NAA is of low toxicity after inhalation acute exposure.	4h exposure	rat	active substance (technical)
b) skin corrosion/ irritation	not irritant	4 h exposure	rabbit	active substance (technical)
c) serious eye dama- ge/irritation	irritant	single dose	rabbit	active substance (technical)
d) respiratory or skin sensitization	not sensitising	72h	mouse	active substance (technical)
e) germ cell mutage- nicity	no indication of geno- toxicity	-	multiple in vitro and in vivo test systems	active substance (technical)

	endpoint	duration	species	tested on
f) carcinogenicity	No carcinogenic properties	2 years	rat	active substance (technical)
g) reproductive toxi- city	NOAEL = 205 mg/kg bw/day	two generation stu- dies	rat	active substance (technical)
h) STOT-single ex- posure	no data available			
i) STOT-repeated exposure	no data available			
i) aspiration hazard	no data available			

Section 12 : Ecological information

12.1 Toxicity

	endpoint	duration	species	tested on
Acute toxicity fish	56 < LC50 < 100 mg/l	96 h	Cyprinus carpio	active substance (technical)

Acute toxicity inver- tebrates	56 < EC50 < 100 mg/l	48 h	Daphnia magna	active substance (technical)
Algae	EbC50 = 18.05 mg/l			
ErC50 = 26.62 mg/l				
(expressed in terms of 1-NAA-acid form)	72h static	Pseudokirchneriella subcapitata	1-NAA-Na	
Aquatic plants	EC50 (fronds) = 5.09 mg/L	14 d	lemna gibba G3	active substance (technical)

12.2 Persistence and degradability

The active substance 1-NAA is rapidly degradable.

12.3 Bioaccumulative potential

log Pow = 2.24 @ pH3; -0.02 @ pH7; 0.32 @ pH 9 (active substance (technical))

12.4 Mobility in soil

Koc: 46.12 - 138.03 mL/g (active substance (technical))

12.5 Results of PBT and vPvB assessment

The active substance does not fulfill the criteria of a persistent, bioaccumulative and toxic (PBT) substance, nor of a very persistent and very bioaccumulative (vPvB) substance, as outlined in Annex XIII of Regulation (EC) No 1907/2008.

12.6 Other adverse effects

Section 13 : Disposal considerations

13.1 Waste treatment methods

Product waste: prevent spreading. To be disposed of in compliance with local and national prescriptions.

Polluted packages: Do not re-use empty packages. If required, rinse 3 times. To be disposed of in compliance with local and national prescriptions.

Section 14: Transport information

7		ADR classification	IMDG classification	IATA classification
	14.1 UN number	/	/	/
×	142 UN proper shipping name	/	/	/
	14.3 Transport hazard class(es)	/	/	/
	14.4 Packing group	/	/	/
	14.5 Environmental hazards	no	no	no
	14.6 Special precautions for user	Symbols: /	Symbols: /	Symbols: /
		Tunnel code: /		

	ADR classification	IMDG classification	IATA classification
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		Not applicable (not transported as bulk)	Not applicable for air transport

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture SEVESO:

- SEVESO category: /
- Named dangerous substances: /

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Relevant H-phrases / R-phrases

R41: Risk of serious damage to eyes

R63: Possible risk of harm to the unborn child.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H318: Causes serious eye damage.

H361d: Suspected of damaging the unborn child.

H290: May be corrosive to metals.

H314: Causes severe skin burns. H302: Harmful if swallowed. List of abbreviations and acronyms RRN: REACh registration number Changes to the previous version of safety data sheet.

The information presented in this SDS is based on the current knowledge of the product and is derived from the existing literature. It is given in good faith and it only illustrates the aspect of security. This SDS is in addition with our information relating to the use of the formulation but in no case replaces it.

The users must be aware of the necessary precautions to take at the time of use or handling of this product. Consequently, the company can in, no case, be held responsible for damage which results, directly or indirectly, from the use of these data.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008, Regulation (EU) No 453/2010 and Regulation (EU) No 2015/830.