

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

1.1. Product identifier

Product form : Mixture
Product name : OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)
Product code : Rsa /Int.Patent AppNo: WO2011061596A3
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use
Use of the substance/mixture : Agricultural water conditioner

Title	Life cycle stage	Use descriptors
OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)	Industrial, Professional	PC37

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Makro Organics Pty Ltd
Unit 1 Floors Brand Street Langebaan Industria
Langebaan, 7357
South Africa
T +27 22 772 0399
info@makroorganics.eu, www.makroorganics.com

Distributor

Makro Organics Europe (Northern Europe)
Buiksloterbreek 90
1034 XE, Amsterdam
The Netherlands
T +31 64 466 5601

Distributor

Makro Organics Europe (Southern Europe)
Av. Alm. Gago Coutinho 38
1E, Lisboa, 1700-031
Portugal
T +351 934 112 172

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains Eucalyptus globulus, ext. . May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Eucalyptus globulus, ext. (84625-32-1)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Eucalyptus globulus, ext. (84625-32-1)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Product name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eucalyptus globulus, ext.	CAS-No.: 84625-32-1 EC-No.: 283-406-2 REACH-no: 01-2119978250-37	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of doubt or persistent symptoms, consult always a physician. If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove the victim into fresh air. In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash skin with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

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

No additional information available

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Alcohol-resistant foam. Dry powder. Carbon dioxide (CO₂). Making extinguishing agents environment-friendly.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity in case of fire : The product itself does not burn.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear personal protective equipment. Keep public away from danger area.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Do not allow to enter drains or water courses. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into a non combustible material e.g.: dry sand/earth/vermiculite kieselguhr, powdered limestone. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Store away from other materials.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage.

Incompatible materials : Strong reducing agents. Metals. combustible materials. strong alkalis.

Storage area : Keep out of direct sunlight.

7.3. Specific end use(s)

No supplementary information available.

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Hydrogen peroxide (H2O2) (7722-84-1)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	3 mg/m ³
Long-term - local effects, inhalation	1.4 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1.93 mg/m ³
Long-term - local effects, inhalation	0.21 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.0126 mg/l
PNEC aqua (marine water)	0.0126 mg/l
PNEC aqua (intermittent, freshwater)	0.0138 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.047 mg/kg dwt
PNEC sediment (marine water)	0.047 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0023 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	4.66 mg/l
Eucalyptus globulus, ext. (84625-32-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.52 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m ³
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	2.04 µg/l
PNEC aqua (marine water)	0.204 µg/l
PNEC aqua (intermittent, freshwater)	10.2 µg/l

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Eucalyptus globulus, ext. (84625-32-1)	
PNEC (Sediment)	
PNEC sediment (freshwater)	0.665 mg/kg dwt
PNEC sediment (marine water)	0.066 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.134 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	20 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Not required for normal conditions of use. Recommendation: Wear eye glasses with side protection according to EN 166.

8.2.2.2. Skin protection

Skin and body protection:

Recommendation: Wear suitable protective clothing. Standard. EN 13034

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (≥ 0.4 mm), butyl rubber (≥ 0.7 mm) and others. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

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Other information:

If on skin, take off contaminated clothing. Keep away from food, drink and animal feedingstuffs. Avoid contact with skin and eyes. Wash hands before breaks and after work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: 100 – 120 °C
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 65 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: > 60 °C
pH	: 6 – 7
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 12 mbar
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.1
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Strong acid. Strong alkalis. Strong oxidizers. Strong reducing agents.

10.6. Hazardous decomposition products

Oxygen. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Eucalyptus globulus, ext. (84625-32-1)	
LD50 oral	3320 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA)

Skin corrosion/irritation : Not classified
pH: 6 – 7
Serious eye damage/irritation : Not classified
pH: 6 – 7
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Eucalyptus globulus, ext. (84625-32-1)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Eucalyptus globulus, ext. (84625-32-1)	
Viscosity, kinematic	1.79 mm ² /s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Eucalyptus globulus, ext. (84625-32-1)	
LC50 - Fish [1]	280 – 57000 µg/l
EC50 - Crustacea [1]	0.307 mg/l
EC50 - Crustacea [2]	0.475 mg/l
EC50 96h - Algae [1]	> 74 mg/l

12.2. Persistence and degradability

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)	
Persistence and degradability	Readily biodegradable.

Eucalyptus globulus, ext. (84625-32-1)	
Persistence and degradability	Rapidly degradable

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

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12.3. Bioaccumulative potential

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

Bioaccumulative potential	Not bioaccumulable.
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Eucalyptus globulus, ext. (84625-32-1)

Partition coefficient n-octanol/water (Log Pow)	4.42
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12.4. Mobility in soil

OxyTurf, OxyAgri, OxyCure, AC-Pro (0.99%)

Ecology - soil	Soluble in water.
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12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Eucalyptus globulus, ext. (84625-32-1)
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Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Eucalyptus globulus, ext. (84625-32-1)
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12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	IATA	ADN	RID
No supplementary information available.				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Eucalyptus globulus, ext.	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Eucalyptus globulus, ext.	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Eucalyptus globulus, ext.	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes:

Revision :

Indication of changes			
Section	Changed item	Change	Comments
	Indication of changes	Added	
	Supersedes	Modified	
	Revision date	Modified	
2.2	Extra phrases	Removed	
15.1	REACH Annex XVII	Modified	

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS-No.	Chemical Abstract Service number
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ED	Endocrine disrupting properties
EC-No.	European Community number
EN	European Standard

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Abbreviations and acronyms:	
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
N.O.S.	Not Otherwise Specified
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TRGS	Technical Rules for Hazardous Substances
SDS	Safety Data Sheet
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative

Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains Eucalyptus globulus, ext. . May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.

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Full text of H- and EUH-statements:

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Full text of use descriptors

PC37	Water treatment chemicals
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The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.