



Qualibra[®]

Wetting agent

syngenta[®]

A wetting and water conservation agent

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




Keep out of reach of children.
Do not eat, drink or smoke when using this product.
Keep away from food or feed and drinks.
Safety data sheet available on request (EUH 208).

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

Syngenta UK Limited
CPC4 Capital Park, Fulbourn, Cambridge CB21 5XE
Tel: Cambridge (01223) 883400

In case of toxic or transport emergency ring +44 (0) 1484 538444 any time

PROTECT FROM FROST
SHAKE WELL BEFORE USE

Product names marked ® or ™, the ALLIANCE FRAME 
the SYNGENTA Logo and the PURPOSE ICON 
are Trademarks of a Syngenta Group Company 

10 litres

L1113515 GBRI/12B PPE 4198472

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IMPORTANT INFORMATION

Apply QUALIBRA as a preventative programme to prevent the development of dry patch (localised dry spot).

DIRECTIONS FOR USE**GENERAL INFORMATION**

QUALIBRA is a wetting and water conservation agent that has been developed to help in the management of water in turfgrass root zones, and to help prevent dry patch (localised dry spot).

QUALIBRA comprises a dynamic penetrant and a powerful polymer. The penetrant component drives more efficient water movement and distribution within the root zone; while the polymer component holds moisture deeply and evenly within the root zone.

It is designed for use on all areas of golf courses, sports fields and other amenity turf areas.

QUALIBRA is well tolerated by all major turf species and allows more uniform distribution of moisture throughout the root zone. Following application water conservation effects occur throughout the root zone and not just on the surface or thatch layers. For optimum turf quality QUALIBRA should be used in conjunction with turf management practices that promote good turf health.

RESTRICTIONS

Prevent spray drift onto surrounding areas. Do not apply when ground is frozen.

CROP SPECIFIC INFORMATION

Apply as a preventative programme to prevent the development of dry patch (localised dry spot)

Rates of Use

Apply at a rate of 20 l/ha in a water volume of 400-1000 litres per hectare.

Timing

Apply QUALIBRA at approximately monthly intervals in a preventative programme to prevent the development of localised dry spot and aid water management.

QUALIBRA would typically be applied from early spring to autumn, but can be applied throughout the year if required.

MIXING AND SPRAYING

Make sure the sprayer is clean and set to give an even application at the correct volume and an even deposit. Half fill the spray tank with clean water and commence agitation. Add the required quantity of QUALIBRA to the spray tank. Complete filling to the required volume and continue to agitate throughout the spraying operation.

Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks or overnight). Make up only the amount of spray required for immediate use.

Thoroughly wash all spray equipment with water immediately after use.

Good Field Practice

As part of our Product Stewardship policy, Syngenta Crop Protection recommends the following precautions should also be observed:

- Wear appropriate clothing - coveralls and protective gloves, when handling the concentrate.

For further information please see www.greencast.co.uk or www.greencast.ie

QUALIBRA is a trademark of a Syngenta Group Company

Safety Data Sheet - v2.1

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

1.1 Product identifier

Trade name: QUALIBRA

Design code: A16982A

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

Use of the Substance/Mixture: Wetting agent

1.3 Details of the supplier of the safety data sheet

Company: Syngenta UK Limited, CPC4, Capital Park, Fulbourn, Cambridge CB21 5XE, United Kingdom

Telephone: +44 (0) 1223 883400

Telefax: +44 (0) 1223 882195

E-mail address of person responsible for the SDS: customer.services@syngenta.com

1.4 Emergency telephone number

Emergency telephone number: +44 1484 538444

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

Precautionary statements: P102 Keep out of reach of children.

P270 Do not eat, drink or smoke when using this product

P401 Keep away from food or feed and drinks

EUH210 Safety data sheet available on request.

Additional Labelling:

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
oxirane, methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether	174955-61-4	Acute Tox. 4; H302 Eye Irrit. 2; H319	>= 20 - < 30

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.

In case of skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

If swallowed: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Nonspecific. No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: There is no specific antidote available. Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing media - small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires: Alcohol-resistant foam or Water spray

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, ver-miculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Specific use(s): Refer to protective measures listed in sections 7 and 8.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye/face protection: No special protective equipment required.

Hand protection

Remarks: No special protective equipment required.

Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.

Respiratory protection: No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: mobile, clear to slightly turbid, liquid

Colour: colourless

Odour: No data available

Odour Threshold: No data available

pH: 4.9 - 9.00 (-10 - 40 °C). Concentration: 1 %w/v

Melting point/range: No data available

Boiling point/boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapour pressure: No data available

Relative vapour density: No data available

Density: 1.045 g/cm³ (20 °C)

Water solubility: No data available

Solubility in other solvents: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity, kinematic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

9.2 Other information

Particle size: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid: No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid: None known

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure: Ingestion, Inhalation, Skin contact, Eye contact

Acute toxicity

Product:

Acute oral toxicity: Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Components:

oxirane, methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether:

Acute oral toxicity: LD50 (Rat, male and female): > 300 - 2,000 mg/kg

Assessment: The component/mixture is moderately toxic after single ingestion.

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: No eye irritation

Components:

oxirane, methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether:

Result: Eye irritation

Remarks: Information given is based on data obtained from similar substances.

SECTION 12: Ecological information

12.1 Toxicity

Components:

oxirane, methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether:

Ecotoxicology Assessment

Acute aquatic toxicity: This product has no known ecotoxicological effects.

Chronic aquatic toxicity: This product has no known ecotoxicological effects.

12.2 Persistence and degradability

Components:

oxirane, methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether:

Biodegradability:

Result: Readily biodegradable.

Biodegradation: 64 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

Product:

Distribution among environmental compartments: Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product:

Where possible recycling is preferred to disposal or incineration. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Contaminated packaging: Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR: Not regulated as a dangerous good

RID: Not regulated as a dangerous good

IMDG: Not regulated as a dangerous good

IATA: Not regulated as a dangerous good

14.2 UN proper shipping name

ADR: Not regulated as a dangerous good

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14.3 Transport hazard class(es)

ADR: Not regulated as a dangerous good

RID: Not regulated as a dangerous good

IMDG: Not regulated as a dangerous good

IATA: Not regulated as a dangerous good

14.4 Packing group

ADR: Not regulated as a dangerous good

RID: Not regulated as a dangerous good

IMDG: Not regulated as a dangerous good

IATA (Cargo): Not regulated as a dangerous good

IATA (Passenger): Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks: Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17): Not applicable

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation: Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain):

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

UK REACH List of substances subject to authorisation (Annex XIV): Not applicable

GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation: Not applicable

Control of Major Accident Hazards Regulations 2015 (COMAH) Not applicable

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

Full text of other abbreviations

Acute Tox.: Acute toxicity

Eye Irrit.: Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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DIRECTIONS FOR USE**GENERAL INFORMATION**

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RESTRICTIONS

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Rates of Use

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Timing

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