1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Master Wett
Product code: OS-02

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

Organosilicone 84%
Supper wett/spreader for use on all crops

1.3 Details of the supplier of the safety data sheet

Global Adjuvants Company
20-22 Wenlock Road
London, N1 7GU, UK
Tel: +44 (0) 1480 810137
Email: office@global-adjuvants.com

1.4 Emergency telephone number

For advice on medical emergencies, fires, spillages or chemical hazards ONLY: **+44 (0) 1480 810137**

2. HAZARDs IDENTIFICATION

2.1 Classification of the substance or mixture: Classification according to Regulation (EC) No 1272/2008 as amended

Serious eye damage/eye irritation Category 2; H319;
Chronic hazards to the aquatic environment Category 2; H411.

2.2 Label elements

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

Signal word
Warning

Hazard statements
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P264: Wash thoroughly after use
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container to a licenced hazardous waste disposal contractor or collection site.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components:

Chemical name	CAS-No.; EC No.; REACH Registration No.	Concentration (%)	Classification [Regulation (EC) No. 1272/2008]
Polyalkyleneoxide modified Heptamethyltrisiloxane	27306-78-1	84%	Category 2; Aquatic Chronic; H411; Category 2; Eye Dam.; H319
Allyloxy polyethylene glycol	27252-80-8	16%	Acute Toxicity 4; H302

For full text of hazard phrases, refer to section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation
After inhalation of aerosol/mist seek medical advice immediately. Move the exposed person to fresh air at once. If breathing is difficult, give oxygen. Call a physician or poison control centre immediately.

Skin contact
Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms persist.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms persist.

Ingestion
Do not induce vomiting. If conscious, drink plenty of water. Call a physician or poison control centre immediately.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

None known.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Alcohol resistant foam. Carbon dioxide Dry chemical.

Unsuitable extinguishing media
None known.

5.2 Special hazards arising from the substance or mixture:
None known.

5.3 Advice for firefighters:
Wear self-contained breathing apparatus and protective clothing. Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin, and clothing. Avoid contact with liquid and vapours. Use personal protective equipment.

6.2 Environmental precautions

Prevent runoff from entering drains, sewers, or streams.

6.3 Methods and material for containment and cleaning up

Absorb spillage with suitable absorbent material. Shovel up and place in a container for salvage or disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling
Do not taste or swallow.
Avoid contact with eyes, skin, and clothing.
Wash hands after handling.
Provide adequate ventilation.
Avoid inhalation of vapours and spray mists.

Other precautions
Consult the manufacturer before using an aerosol of the neat liquid.

Advice on protection against fire and explosion
All equipment used when handling the product must be grounded.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers
Keep container tightly closed.
Keep away from sources of ignition - No smoking.
Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

Contains no substances with occupational exposure limit values.

DNEL-Values
No data available

PNEC-Values
No data available

8.2 Exposure controls

Appropriate engineering controls
Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.

Personal protective equipment (ppe)
Respiratory protection: Respirator with a vapour filter (EN 141)
Hand protection: Advice: This recommendation is valid only for our Product as delivered. If this product will be mixed with other substances you need to contact a supplier of CE approved protective gloves.
Eye protection: Safety glasses with side-shields conforming to EN166
Skin and body protection: Safety shoes. Wear suitable protective clothing.
Hygiene measures: Do not breathe vapour/aerosol. When using do not eat, drink or smoke. Use only with adequate ventilation. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Liquid, Pale yellow
Odour: Polyether
Odour Threshold: No data available.
pH: No data available.
Melting (freezing) Point: -1 °C
Boiling point/boiling range: > 150 °C at 1.013 hPa Copolymer
Flash Point: 116 °C Method: ASTM D 93
Evaporation Rate: <1
Lower explosion limit: No data available.
Upper explosion limit: No data available.
Vapour pressure: < 1,33 hPa at 20 °C
Vapour Density: >1
Density: 1,0070 g/cm3 at 25 °C (1,013 hPa)
Solubility(ies): Solubility in Water: Dispersible
Partition Coefficient: n-octanol/water:
POW: > 1.951, Log Pow (n-Octanol/Water Partition Coefficient): > 3,29
POW: > 1.926, Log Pow (n-Octanol/Water Partition Coefficient): > 3,28
POW: > 3.997, Log Pow (n-Octanol/Water Partition Coefficient): > 3,60
Autoignition Temperature: No data available.
Thermal decomposition: Note: No decomposition if stored and applied as directed.
Viscosity, dynamic: 24 mPa.s
Viscosity, kinematic: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
No data available

10.3 Possibility of hazardous reactions
No dangerous reaction if used as recommended.

10.4 Conditions to avoid
None known.

10.6 Hazardous decomposition products

Carbon oxides, Oxides of silicon.
Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

This product has been tested.

Acute oral toxicity
LD50 Rat
Dose: > 2.000 mg/kg slightly toxic

Acute inhalation toxicity
LC50 Rat
Dose: 2 mg/l
Exposure time: 4 h
Aerosols:
LC50 Rat
Dose: >11,78 mg/l
Exposure time: 4 h Aerosols 5% Diluted aqueous solution.

Acute dermal toxicity
LD50 Rat Dose: > 2.000 mg/kg slightly toxic

Skin irritation
Rabbit Result: No skin irritation

Eye irritation
Rabbit Result: Strongly irritating.

Sensitization
Guinea Pig Result: Did not cause sensitization on laboratory animals.

Repeated dose toxicity
Oral Rat Exposure time: 28 d
NOAEL: 150 mg/kg
Method: OECD 422

Component data: Polyalkyleneoxide modified heptamethyltrisiloxane

Acute oral toxicity
LD50 Rat Dose: > 2.000 mg/kg

Acute inhalation toxicity
LC50 Rat
Dose: 2 mg/l
Exposure time: 4 h
LC50 Rat
Dose: > 11,78 mg/l
Exposure time: 4 h
5% Diluted aqueous solution

Acute dermal toxicity
LD50 Rat
Dose: > 2.000 mg/kg

Eye irritation
Rabbit Result: Strongly irritating.

Sensitization
Guinea Pig Result: negative

Genetic Toxicity in vitro
Test type: Ames-Test - Result: negative
Test type: Chinese Hamster Ovary (CHO) - Result: negative
Test type: Mammalian cytogenicity test - Result: negative

Genetic toxicity in vivo
Test type: Micronucleus test - Result: negative

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product has been tested. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to fish
LC50 Species: Zebra Fish
Dose: 2,75 mg/l
Exposure time: 96 h
NOEC Species: Zebra Fish
Dose: 0,56 mg/l
Exposure time: 96 h
LC50 Species: *Lepomis macrochirus*
Dose: 6 mg/l
Exposure time: 96 h
NOEC Species: *Lepomis macrochirus*
Dose: 2,5 mg/l

Toxicity to other organisms
EC50 Species: *Daphnia similis*
Dose: 22,61 mg/l
Exposure time: 48 h
NOEC Species: *Daphnia similis*
Dose: 10 mg/l
Exposure time: 48 h
EC50 Species: *Daphnia magna*

Dose: 37 mg/l
Exposure time: 48 h
NOEC Species: *Daphnia magna*
Dose: 25 mg/l
Exposure time: 48 h

Toxicity to algae
EC50 Species: *Selenastrum capricornutum*
Dose: 5,5 mg/l
Exposure time: 96 h
NOEC Species: *Selenastrum capricornutum*
Dose: 1 mg/l
Exposure time: 96 h

Toxicity to microorganisms
MEC90 Species: *Spirillum volutans*
Dose: > 0,201 mg/l
Exposure time: 120 min (highest concentration tested)
Uncoordinated mobility in 90% of the population

Component data: Polyalkyleneoxide modified Heptamethyltrisiloxane

Toxicity to fish
LC50 Species: Zebra Fish
Dose: 2,75 mg/l
Exposure time: 96 h
NOEC Species: Zebra Fish
Dose: 0,56 mg/l
Exposure time: 96 h

Toxicity to other organisms
EC50 Species: *Daphnia similis*
Dose: 22,6 mg/l
Exposure time: 48

Toxicity to algae
EC50 Species: Algae
Dose: 5,5 mg/l
Exposure time: 96 h
NOEC Species: Algae
Dose: 1 mg/l
Exposure time: 96 h

Toxicity to microorganisms
MEC90 Species: *Spirillum volutans*
Exposure time: 2 h (highest concentration tested)
Uncoordinated mobility in 90% of the population

Toxicity other non-mammal terrestrial species
LC50 Species: Earthworm
Dose: > 4.777,78 mg/kg
Exposure time: 14 d (highest concentration tested)

12.2 Persistence and degradability

The product is not readily biodegradable.

12.3 Bioaccumulation

Product: No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product: No data available
No data available

12.6 Other adverse effects

None known.

13. DISPOSAL INFORMATION

13.1 Waste treatment methods

Product: Can be incinerated when in compliance with local regulations.
Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

Land transport (ADR/RID)
14.1 UN Number: 3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Contains: Polyalkyleneoxide Modified Heptamethyltrisiloxane
14.3 Transport hazard class(es): 9
14.4 Packing group: III
Classification code: M6
Hazard identification no.: 90
14.6 Special precautions for user: Limited quantities (ADR) 1L

Inland waterway transport (ADNR)
14.1 UN Number: 3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Contains: Polyalkyleneoxide Modified Heptamethyltrisiloxane
14.3 Transport hazard class(es): 9
14.4 Packing group: III
Classification code: M6
Hazard identification no.: 90

Sea transport (IMDG)
14.1 UN Number: 3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Contains: Polyalkyleneoxide Modified Heptamethyltrisiloxane
14.3 Transport hazard class(es): 9
14.4 Packing group: III
14.5 Marine pollutant: YES
IMDG-Label: 9
EmS: F-A, S-F
14.6 Special precautions for user: Limited quantities (IMDG) 1L

Air transport (ICAO/IATA)
14.1 UN Number: 3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Contains: Polyalkyleneoxide Modified Heptamethyltrisiloxane
14.3 Transport hazard class(es): 9

14.4 Packing group: III
ICAO-Labels: 9MI

15. REGULATORY INFORMATION

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

None known.

15.2 Chemical safety assessment

National legislation
Water contaminating class: WGK 1 slightly water endangering (Germany)

16. OTHER INFORMATION

Always read the label and product information before use.

Wording of the H-statements in section 2 and 3
H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

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