

Safety Data Sheet (SDS) MES 480SC/01

According to SANS 10234:2019/UN GHS 7th Ed

Revision Date: 2021/01/21

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First print date: 2021/01/21

Version: 1.0

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

Product identifier:

Identification as on the label/Trade name: **MESOCLEAR 480SC**

Additional information: Product code MES 480SC/01

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide.

Uses advised against: Use only as directed.

Formulator:

Shandong Weifang Rainbow Chemical Co., Ltd.
Binhai Economic Development Area, Weifang,
Shandong 262737
China

Registration holder:

AECI Limited
14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to:

SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Specific target organ toxicity repeated exposure (Category 2)	H373
Reproduction toxicity (Category 2)	H361d
Hazardous to the aquatic environment (Acute 1)	H400
Hazardous to the aquatic environment (Chronic 1)	H410

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: May cause damage to eyes and nervous system.

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Label elements

Hazard pictograms:



Signal Word: Warning

Hazard Statements: H373 May cause damage to organs (eyes, nervous system) through prolonged or repeated exposure. H361d Suspected of damaging the unborn child. H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P201 Obtain special instruction before use. P264 Wash thoroughly after handling. P263 Avoid contact during pregnancy/ while nursing. P280 Wear protective gloves. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P501 Dispose of contents and container (according to the description in the related regulation).

Special labelling of certain mixtures: None.

Other hazards: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
	EC-No.		EC1272/2008
Mesotrione	104206-82-8	40-50%	STOT RE 2 (eyes, nervous system) H373. Reproduction toxicity (Category 2) H361d. Aquatic acute 1 H400 M=10. Aquatic chronic 1 H410 M=10.
	600-533-4		

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations, applicable are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if you feel unwell.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation persists.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation persists.

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In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if you feel unwell.

Most important symptoms and effects, both acute and delayed:

Inhalation: May cause harm if inhaled.

Ingestions: May cause harmful if swallowed.

Skin contact: None.

Eye contact: May cause mild eye irritation.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Carbon dioxide, dry powder, or alcohol-resistant foam.

SMALL FIRE: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

LARGE FIRE: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Vapours may be toxic. Self-contained breathing apparatus required. Do not allow contaminated runoff to enter drains.

Advice for fire-fighters:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Keep all personal away. Avoid contact with skin, eyes, clothing.

For emergency responders: Isolate the spill area and limit the access to emergency responders only. Avoid any contact with spilled material, use adequate protective clothes and gloves.

Environmental precautions:

Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Methods for containment and cleaning up:

For small spills Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

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See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid prolonged contact with concentrate. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from food, drink and animal feeding stuffs.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL):

None

Biological exposure indices (BEI):

None

Additional exposure limits under the conditions of use:

None.

Exposure control: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective OEL's if applicable. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

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Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Wear appropriate clothing for task or operation. Keep working clothes separately.

Respiratory protection: Respiratory protection is required when ventilation is inadequate, or discomfort is experienced; use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Off white.

Odour: Characteristic.

Odour threshold: No information available.

pH (at concentration): 4.0-7.0 (100%).

Melting point/range (°C): No information available

Boiling point/range (°C): No information available

Flash point (°C): Not flammable.

Evaporation rate: No information available.

Flammability (solid, gas): No information available

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (25°C): 4.2 mPa

Vapour density: No information available.

Specific gravity: 1.125 g/mL.

Water solubility (g/l) at 20°C: No information available.

n-Octanol/Water partition coefficient: No information available.

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Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

Physical hazards:

Explosive properties: Not explosive.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Bulk density: No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND RELIABILITY

Reactivity:

The product is stable under normal conditions for at least 2 years.

Chemical stability:

Relatively stable in neutral, weakly acidic and weakly alkaline media.

Possibility of hazardous reactions:

No information.

Conditions to avoid:

Strong acids and alkalis.

Incompatible materials:

Compatible with most herbicide formulations except very strong acid/alkaline and oxidizing agents

Hazardous decomposition products:

Oxides of carbon.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Method: No Information available.

Dosage: No Information available.

Routes of administration: No Information available.

Results: No Information available.

Absorption: No Information available.

Distribution: No Information available.

Metabolism: No Information available.

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Excretion:

Mesotrione

In animals extensively absorbed (c. 70% in 72 h), widely distributed and excreted (up to 70% in 72 h), mainly via urine. Limited metabolism occurs, by hydroxylation.

Information on toxicological effects:

Acute toxicity:

Mesoclear 480SC

Acute oral LD₅₀ for rats >5000 mg/kg.

Acute dermal LD₅₀ for rat >2000 mg/kg.

Inhalation LC₅₀ (4 h) for rats >5 mg/ℓ.

Mesotrione

Acute oral LD₅₀ for rats >5000 mg/kg.

Acute dermal LD₅₀ for rat >2000 mg/kg.

Inhalation LC₅₀ (4 h) for male and female rats >5 mg/ℓ.

Chronic toxicity: No information.

Skin corrosion/irritation:

Mesoclear 480SC

Practically non -irritant to skin.

Mesotrione

Non-irritant to skin for rabbits.

Eye corrosion/irritation:

Mesoclear 480SC

Mildly irritating.

Mesotrione

Non-irritant to eyes for rabbits.

Respiratory or skin sensitization:

Mesotrione

Not a skin sensitiser in guinea pigs.

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No Information available.

Aspiration hazard: No information available.

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SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Selective herbicide - very toxic to some plant species.

Mesotrione

Birds: Acute oral LD₅₀ bobwhite quail >2000 mg/kg. Dietary LC₅₀ for bobwhite quail and mallard ducks >5200 mg/kg.

Fish: LC₅₀ (96 h) for bluegill sunfish and rainbow trout >120 mg/ℓ.

Daphnia: LC₅₀/EC₅₀ (48 h, static) >900 mg/l.

Algae: LC₅₀/EC₅₀ (120 h, static) for *Selenastrum capricornutum* 3.5 mg/ℓ.

Other aquatic species: LC₅₀ (14 d) for *Lemna gibba* 0.0077 mg/ℓ.

Bees: LD₅₀ (oral >11µg/bee, (contact) >9.1 µg/bee based on 100g/ℓ formulation.

Worms: NOEL ≥1000 mg/kg.

Persistence and degradability:

Degradation is faster at higher pH values.

Bioaccumulative potential:

No information available.

Mobility in soil

No information available.

Results of PBT& vPvB assessment:

No information available.

Other adverse effects:

None.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3082	3082	3082
UN Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Mesotrione)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Mesotrione)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Mesotrione)
Transport hazard class:	9	9	9
Packaging group:	III	III	III
Marine pollutant:	yes	yes	yes
Special precautions for user:	No information	No information	No information

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Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No information	No information	No information
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Inland waterways: No information

Emergency response information: No information

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH).

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No.

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned.

Relevant classification and H statements (number and full text):

Aquatic acute 1: Hazardous to the aquatic environment (Acute 1)

Aquatic chronic 1: Hazardous to the aquatic environment (Chronic 1)

STOT RE 2 Specific target organ toxicity repeated exposure (Category 2)

H373 May cause damage to organs (eyes, nervous system) through prolonged or repeated exposure. H361d Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.