

Safety Data Sheet (SDS) THA 960EC/01

According to UN GHS 9th Ed

Revision Date: 2023/10/30

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Version: 2.0

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

Product identifier:

Identification as on the label/Trade name: **THALA 960EC**

Additional information: Product code THA 960EC/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

Details of the distributor:

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
Acute toxicity oral (Category 4)	H302
Acute toxicity dermal (Category 5)	H313
Acute toxicity inhalation (Category 4)	H332
Skin irritation (Category 2)	H315
Skin sensitization (Category 1)	H317
Serious eye damage (Category 1)	H318
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.

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The most important adverse human health effects: May cause an allergic skin reaction.

Label elements

Hazard pictograms:



Signal Word: Warning

Hazard Statements: H302 Harmful if swallowed. H313 May be harmful in contact with skin. H332 Harmful if inhaled. H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. P264 Wash body thoroughly after handling. P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. P264+P265 Wash hands thoroughly after handling. Do not touch eyes. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves. P301 + P317 IF SWALLOWED Get medical help. P302 + P317 IF ON SKIN Get medical help. P302+P352 IF ON SKIN Wash with plenty water. P321 Specific treatment (see this label). P304 + P340 IF INHALED Remove person to fresh air and keep comfortable for breathing. P305 + P354 + P338 IF IN EYES Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P330 Rinse mouth. P332 + P317 If skin irritation occurs Get medical help. P333 + P317 If skin irritation or rash occurs Get medical help. P317 Get medical help. P362 + P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. P264 Wash body thoroughly after handling.

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
	EC-No.	
Metolachlor	51218-45-2	80-90%
	257-060-8	
Others up to 100%		

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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.

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 respiratory irritation.

Ingestions: May be harmful if swallowed.

Skin contact: May cause skin allergies.

Eye contact: Causes serious 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.

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.

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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:

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.

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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.

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: Amber to brown.

Odour: Faint odour.

Odour threshold: No information available.

pH (at concentration): 5.3 (100%).

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

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

Flash point (°C): No information available.

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.

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Vapour pressure (25°C): 4.2 mPa

Vapour density: No information available.

Specific gravity: 1.11-1.13 g/mL @20°C.

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

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

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.

Chemical stability:

Relatively stable in neutral, weakly acidic and weakly alkaline media; hydrolysed by stronger acids and bases.

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:

Oxide of carbon, nitrogen, hydrogen chloride gas and other compound of chlorine.

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SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Excretion:

Metolachlor

In animals, rapidly oxidised by rat liver microsomal oxygenases via dechlorination , O-demethylation and side-chain oxidation.

Information on toxicological effects: (ref. pesticide manual 15th ed)

Acute toxicity:

Metolachlor:

Acute oral LD₅₀ for female rats 1063 mg/kg, male rats 1936 mg/kg.

Dermal LD₅₀ for rabbits >5050mg/kg.

Inhalation LC₅₀ (4 h) for rats >2.02mg/ℓ air.

Chronic toxicity: No information.

Skin corrosion/irritation:

Metolachlor

Mild skin irritant for rabbit.

Eye corrosion/irritation:

Metolachlor:

Mildly irritating for rabbits.

Respiratory or skin sensitization:

Metolachlor:

May cause sensitisation by skin contact 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.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity: (ref. pesticide manual 15th ed)

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high- water mark. Do not contaminate water when disposing of equipment wash waters or rinse water.

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Birds: Acute oral LD₅₀ for bobwhite quail and mallard ducks >2150 mg/kg. Dietary LC₅₀ (8 d) bobwhite quail and mallard ducks >10 000 mg/kg.

Fish: LC₅₀ (96 h) for rainbow trout 3.9 mg/ℓ, carp 4.9 mg/ℓ and bluegill sunfish 10 mg/ℓ.

Daphnia: LC₅₀ (48 h) 25 mg/ℓ.

Algae: E_bC₅₀ (120 h) for *Selenastrum capricornutum* 0.1 mg/ℓ.

Bees LD₅₀ (oral and contact) >110 µg/bee.

Worms: LC₅₀ (14 d) for earthworms 140 mg/kg soil.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil

Metolachlor:

Major aerobic metabolites are derivatives of oxanilic and sulfonic acids.

Results of PBT& vPvB assessment:

No information available.

Other adverse effects:

None.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Consider suitable waste recycling, re-use or recovery options. Dispose of in accordance with municipal, provincial and national regulations. Waste Classification and Management Regulations (GN 634 of 2013). Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

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. (Metolachlor)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metolachlor)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metolachlor)
Transport hazard class:	9	9	9
Packaging group:	III	III	III
Marine pollutant:	yes	yes	yes

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Special precautions for user:	No information	No information	No information
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No information	No information	No information

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 Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2021.

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

Relevant information regarding restrictions: None.

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:

All sections.

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)

H302 Harmful if swallowed. H313 May be harmful in contact with skin. H332 Harmful if inhaled. H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. 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.

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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.