

MATERIAL SAFETY DATA SHEET



Katalyst[®] MSDS

1. Product Identification

Product name: Katalyst[®]

Type: liquid fertilizer for agricultural use

Manufacturer: Astra Industrial Complex Co., Ltd. "ASTRACHEM"
Kingdom of Saudi Arabia

Tel. No: (+ 966)13 8121464

Fax No: (+ 966) 13 8121347

2. Composition/Information on Ingredients

Nutrients Contents in % (w/v)

Nitrogen (N)	12.1
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BORON (B)	11.3
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3. Hazards Identification

Precautionary Labelling

Health – 1 slight

Flammability – 0 none

Reactivity – 1 slight

Contact – 0 none

Hazard ratings are 0 to 4 (0= no hazard; 4=extreme hazard)

Avoid contact with eyes, skin, and clothing. Keep in tightly closed container. Wash thoroughly after handling. In case of fire, soak with water. In case of spill, sweep and remove. Flush spill area with water.

4. First Aid Measures

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Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire Extinguishing Media:

Product itself is not combustible and non explosive, adapt fire extinguishing measures to surrounding areas

Special Information:

Use self contained breathing apparatus

Do not inhale explosion and/or combustion gases

Wear protective clothing.

6. Accidental Release Measures

Remove sources of heat and ignition.

Collected waste may be transferred to a closed, preferably metal, container and sent to a RCRA approved waste disposal facility.

Alternatively, sweep spill into noncombustible container and dissolve in large amount of water. Add soda ash. Mix and neutralize with 6M-HCl. Neutralized sludge may be sent to an approved waste disposal facility.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Protect against physical damage. Store in a dry location separate from combustible, organic or other readily oxidizable materials. Avoid storage on wood floors. Remove and dispose of any spilled dichromates; do not return to original containers. Do not store above 54C

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(130F) preferably below 30C (86F). Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Dark Blue Viscous Liquid

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10. Stability and Reactivity

Stable at normal conditions of storage, handling and use.

11. Toxicological Information

Toxicity: LD 50 (Oral rat)

Carcinogenicity: NTP: No IARC: No Z: No OSHA Reg : No effects of overexposure: Contact with skin or eyes may cause irritation. Dust may irritate nose and throat. Target organs: None identified. Medical conditions generally aggravated by exposure: None identified routes of entry skin contact, eye contact, and inhalation.

Emergency and first aid procedures: Call physician. If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Flush skin with water.

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Steps to be taken in the event of a spill or discharge: Carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal procedure: Dispose in accordance with all applicable country and local environmental regulations.

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14. Transport Information

UN classification

Not classified considered non-hazardous material according to the UN Orange Book and following international transport codes e.g. RID (rail), ADR (road) and IMDG (sea).

15. Regulatory Information

N/A

16. Other Information

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material/(s) or when used otherwise than as described herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may represent unknown hazards and should be used with caution.

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For Fertilizers and Agrochemicals
"ASTRACHEM"