

SAFETY DATA SHEET

MOLYBDENUM 15

SDS # : HA293-A
Revision date: 2018-07-23
Format: NA
Version 1.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name MOLYBDENUM 15

Other means of identification

Product Code(s) HA293-A

Recommended use of the chemical and restrictions on use

Recommended Use: A fertilizer with micronutrients for use in agriculture and horticulture

Restrictions on Use: Use as recommended by the label.

Supplier Address

Manufacturer Address FMC Agro Limited
Rectors Lane
Pentre
Flintshire
CH5 2DH
United Kingdom
Tel: + 44 (0) 1244 537370
E-mail: fmc.agro.uk@fmc.com

Emergency telephone number +44(0)1244 537370 (office hours only)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

**Precautionary Statements - Prevention**

P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

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

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P332 + P313 - If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS-No | Weight % |
|-----------------|-----------|----------|
| Phosphoric acid | 7664-38-2 | 10-30 |

4. FIRST AID MEASURES**Eye Contact**

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Skin Contact

Immediately remove all stained or splashed clothing that is not adhering to the skin. Wash off immediately with soap and plenty of water.

Inhalation

Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion

Clean mouth with water and afterwards drink plenty of water

Most important symptoms and effects, both acute and delayed

Skin contact: May see mild irritation at the site of contact.

Eye contact: Possible irritation and redness.

Ingestion: Possible irritation of the throat.

Inhalation: May experience irritation of the throat with a feeling of tightness in the chest.

Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.

Indication of immediate medical attention and special treatment

Treat symptomatically.

needed, if necessary

5. FIRE-FIGHTING MEASURES

| | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Specific Hazards Arising from the Chemical | Toxic fumes may be released in fire situations. |
| Explosion data | |
| Sensitivity to Mechanical Impact | No information available. |
| Sensitivity to Static Discharge | No information available. |
| Protective equipment and precautions for firefighters | As in any fire, wear self-contained breathing apparatus and full protective gear. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Precautions | Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8. |
| Other | Ventilate the area. |
| Environmental Precautions | Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. |
| Methods for Containment | Dike far ahead of liquid spill for later disposal. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. |
| Methods for cleaning up | Wash spillage site with large amounts of water. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Dispose of waste as indicated in Section 13. |

7. HANDLING AND STORAGE

| | |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling | Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Prevent the formation of vapors, mists and aerosols. Do not breathe vapours or spray mist. |
| Storage | Store above 5°C. Keep container tightly closed. Store in original container. |
| Incompatible products | Strong oxidizing agents, Strong bases |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH | Mexico |
|--------------------------------|-------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Phosphoric acid (7664-38-2) | STEL 3 mg/m ³ TWA: 1 mg/m ³ | TWA: 1 mg/m ³ | IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³ | Mexico: TWA 1 mg/m ³ Mexico: STEL 3 mg/m ³ |
| Chemical name | British Columbia | Quebec | Ontario TWA EV | Alberta |
| Phosphoric acid (7664-38-2) | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |

Appropriate engineering controls

| | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engineering measures | Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment. |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye/Face Protection | Safety glasses with side-shields. Maintain eye wash fountain and quick-drench facilities in work area. |
| Skin and Body Protection | Wear suitable protective clothing. Protective shoes or boots. |
| Hand Protection | Protective gloves |
| Respiratory Protection | No special protective equipment required. |
| Hygiene measures | Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing separately from regular household laundry. |
| General information | If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|-------------------------------------|--------------------------|
| Appearance | Liquid |
| Physical State | Liquid |
| Color | No information available |
| Odor | Barely perceptible |
| Odor threshold | No information available |
| pH | ~3.5 |
| Melting point/freezing point | Not applicable |
| Boiling Point/Range | No information available |
| Flash point | Not applicable |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Density | No information available |
| Specific gravity | ~ 1.63 |
| Water solubility | Soluble in water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity, kinematic | No information available |
| Viscosity, dynamic | No information available |
| Explosive properties | No information available |
| Oxidizing properties | Non-oxidizing |
| Molecular weight | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

| | |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Reactivity | Stable under recommended storage conditions |
| Chemical Stability | Stable under recommended storage conditions. |
| Possibility of Hazardous Reactions | None under normal processing. Decomposition may occur on exposure to conditions or materials listed below. |
| Hazardous polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | Heat |

Incompatible materials Strong oxidizing agents, Strong bases.
Hazardous Decomposition Products May emit toxic fumes under fire conditions.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 2000 mg/kg (rat) (Calculated Estimated Acute Toxicity - EAT)
LD50 Dermal > 2000 mg/kg (rat) (Calculated Estimated Acute Toxicity - EAT)
LC50 Inhalation > 5 mg/L 4 hr (rat) (Calculated Estimated Acute Toxicity - EAT)

Serious eye damage/eye irritation Risk of serious damage to eyes.
Skin corrosion/irritation Irritating to skin.
Sensitization Not expected to be sensitizing based on the components.

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------------------|--------------------|-----------------------|-----------------------------------|
| Phosphoric acid (7664-38-2) | > 2000 mg/kg (rat) | = 2740 mg/kg (rabbit) | > 850 mg/m ³ (rat) 1 h |

Information on toxicological effects

Symptoms Skin contact: May see mild irritation at the site of contact.
Eye contact: Possible irritation and redness.
Ingestion: Possible irritation of the throat.
Inhalation: May experience irritation of the throat with a feeling of tightness in the chest.
Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability No information available.
Bioaccumulation No information available.
Mobility Soluble in water.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated Packaging Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

NOTE NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT

REGULATIONS.

| | |
|------------------|---------------|
| <u>DOT</u> | NOT REGULATED |
| <u>TDG</u> | NOT REGULATED |
| <u>ICAO/IATA</u> | NOT REGULATED |
| <u>IMDG/IMO</u> | NOT REGULATED |

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic health hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

Clean Water Act

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Phosphoric acid 7664-38-2 | 5000 lb | | | X |

CERCLA

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|------------------------------|--------------------------|------------------------------------|
| Phosphoric acid 7664-38-2 | 5000 lb 2270 kg | |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Phosphoric acid 7664-38-2 | X | X | X |

International Inventories

| Chemical name | TSCA (United States) | DSL (Canada) | EINECS/ELINCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|------------------------------|-------------------------|-----------------|---------------------------|-----------------|------------------|--------------|------------------------|---------------------|
| Phosphoric acid 7664-38-2 | X | X | X | X | X | X | X | X |

| Chemical name | Carcinogen Status | Mexico |
|-----------------|-------------------|---------------------------------------------------------------------|
| Phosphoric acid | | Mexico: TWA 1 mg/m ³ Mexico: STEL 3 mg/m ³ |

16. OTHER INFORMATION

| | | | | |
|------|------------------|----------------|-------------------|-----------------------|
| NFPA | Health Hazards 2 | Flammability 0 | Instability 0 | Special Hazards - |
| HMIS | Health Hazards 2 | Flammability 0 | Physical hazard 0 | Personal Protection X |

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date: 2018-07-23
Reason for revision: Format Change

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2018 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet