

AMMONIUM MOLYBDATE, (Tetra), EXTRA PURE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: Ammonium Molybdate, (Tetra), EXTRA PURE

Product Code: CM 23,410

CAS#: 12054-85-2

Chemical Formula: $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$

Molecular Formula: 1235.86 g/mol

Formula Weight: NA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Synonyms: Ammonium heptamolybdate tetrahydrate

Formula: $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$

Molecular Weight: 1235.86 g/mol

CAS-No.: 12054-85-2

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008. not a hazardous substance or mixture.

Other hazards:

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact: Flush eyes with water as a precaution.

Skin Contact: Wash off with soap and plenty of water. Consult a physician.

Serious Skin Contact: Not available

Serious Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Serious Ingestion: Not available

Most important symptoms and effects, both acute and delay No data available

Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture no data available



Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Specific end use(s) A part from the uses no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls
Personal protective equipment
Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	Form	: White crystalline powder.
Odour		: Not available
Taste		: Not available
Molecular Weight		: Not available
Colour		: Not available
pH		: Not available
Boiling Point		: Not available
Melting Point		: Not available
Critical Temperature		: Not available
Specific Density		: Not Available
Vapor Pressure		: Not Available
Vapor Density		: Not available
Volatility		: Not Available
Odor Threshold		: Not Available
Water/Oil Dist. Coeff.		: Not Available
Ionicity (in Water)		: Not Available
Dispersion Properties		: Not Available



Solubility : Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity no data available

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions Generates dangerous gases or fumes in contact with: Strong acids

Conditions to avoid no data available

Incompatible materials no data available

Hazardous decomposition products no data available

Other decomposition products no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 420)

Remarks: (in analogy to similar compounds)

LC50 Inhalation - Rat - male and female - 4 h - > 5,05 mg/l - dust/mist (OECD Test Guideline 403)

Remarks: The value is given in analogy to the following substances: Molybdenum dioxide

LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)

Remarks: The value is given in analogy to the following substances: disodium molybdate

Skin corrosion/irritation:

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

Remarks: The value is given in analogy to the following substances: Molybdenum dioxide

Serious eye damage/eye irritation:

Eyes - Rabbit

Result: No eye irritation(OECD Test Guideline 405)

Remarks: The value is given in analogy to the following substances: Molybdenum dioxide

Respiratory or skin sensitization: Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406) Remarks:

The value is given in analogy to the following substances: molybdenum(VI) oxide

Germ cell mutagenicity:

Test Type: Micronucleus test

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 487

Result: negative

Remarks: The value is given in analogy to the following substances: Disodium molybdate dihydrate

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: The value is given in analogy to the following substances: Disodium molybdate dihydrate

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: The value is given in analogy to the following substances: Disodium molybdate dihydrate

Test Type: Ames test

Test system: Salmonella typhimurium



Method: OECD Test Guideline 471
 Result: negative
 Remarks: The value is given in analogy to the following substances: Disodium molybdate dihydrate
 Test Type: Micronucleus test
 Species: Rat
 Cell type: Red blood cells (erythrocytes)
 Application Route: Oral
 Method: OECD Test Guideline 474
 Result: negative
 Remarks: The value is given in analogy to the following substances: disodium molybdate
 The value is given in analogy to the following substances: Disodium molybdate dihydrate
 Carcinogenicity: no data available
 Reproductive toxicity: no data available
 Specific target organ toxicity: no data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity no data available
 Persistence and degradability no data available
 Bio-accumulative potential no data available
 Mobility in soil no data available
 Results of PBT and vPvB assessment PBT/vPvB assessment This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.
 Other adverse effects no data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:
 ADR/RID: IMDG: IATA:

UN proper shipping name
 ADR/RID: Not dangerous goods
 IMDG: Not dangerous goods
 IATA: Not dangerous goods

Transport hazard class(es):
 ADR/RID: IMDG: IATA:

Packaging group:
 ADR/RID: IMDG: IATA:

Environmental hazards: IMDG Marine pollutant: no IATA: no
 ADR/RID: no

SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information: This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture:



This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements

LD50 Oral - Rat - male and female - > 2.000 mg/kg

LC50 Inhalation - Rat - male and female - 4 h - > 5, 05 mg/l - dust/mist

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

Other Special Considerations: Not available.

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