

MATERIAL SAFETY DATA SHEET

Ammonium perrhenate

Version No. 1.0 **SDS reference number:** XXX
Initial issue date: XX-XX-XXXX **Revision date:** XX-XX-XXXX

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

1.1 PRODUCT IDENTIFIER
SUBSTANCE NAME: **AMMONIUM PERRHENATE**

EC No.: 237-075-6

IUPAC NAME: Ammonium oxido(trioxo)rhenium

REACH REGISTRATION No.: **TO BE ADDED BY COMPANY**

CAS No.: 13598-65-7

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
RELEVANT IDENTIFIED USES: Use as an intermediate (SU 9, SU 14)

USES ADVISED AGAINST: None identified

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET: **TO BE ADDED BY COMPANY**
MANUFACTURER/SUPPLIER:
ADDRESS:
COUNTRY:
TELEPHONE NUMBER:
FAX NUMBER:
EMAIL ADDRESS OF COMPETENT PERSON RESPONSIBLE FOR THE SDS:

1.4 EMERGENCY TELEPHONE NUMBER: **TO BE ADDED BY COMPANY**

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

2.1.1 CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 (CLP/GHS)
Not classified

2.1.2 CLASSIFICATION ACCORDING TO EC DIRECTIVE 67/548/EEC
Not classified

2.1.3 ADDITIONAL INFORMATION

2.2 LABEL ELEMENTS:

PICTOGRAM(s): None required

SECTION 2. HAZARDS IDENTIFICATION

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Not classified

2.1.3 ADDITIONAL INFORMATION

2.2 LABEL ELEMENTS:

SIGNAL WORD: None required

HAZARD STATEMENT(S): None required

PRECAUTIONARY STATEMENT(S): None required

2.3 OTHER HAZARDS**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME	CAS-No	EINECS/ELINCS	WEIGHT % CONTENT
AMMONIUM PERRHENATE	13598-65-7	237-075-6	≥99.5%

SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

GENERAL NOTES:

In case of accident or if you feel unwell, seek medical advice immediately.

FOLLOWING INHALATION:

Supply fresh air; consult doctor in case of complaints.

FOLLOWING SKIN CONTACT:

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

FOLLOWING EYE CONTACT:

Rinse opened eye for several minutes under running water. Seek immediate medical advice.

FOLLOWING INGESTION:

Rinse out mouth and then drink plenty of water. Seek immediate medical advice

4.2 MOST IMPORTANT EFFECTS/SYMPTOMS

No data

4.3 IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

No data

SECTION 5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

SECTION 5. FIREFIGHTING MEASURES

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:	In case of fire, the following can be released: Ammonia, Nitrogen oxides (NOx).
5.3 ADVICE FOR FIRE FIGHTERS	Wear self-contained respiratory protective device. Wear fully protective suit. No special measures required.
ADDITIONAL INFORMATION:	Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:	The usual precautionary measures are to be adhered to when handling chemicals. Wear protective equipment. Keep unprotected persons away. Avoid formation of dust. Use respiratory protective device against the effects of fumes/dust/aerosol.
6.2 ENVIRONMENTAL PRECAUTIONS:	Do not allow to enter sewers/surface or ground water. Do not allow to penetrate the ground/soil.
6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:	Pick up mechanically. Prevent formation of dust. Send for recovery or disposal in suitable receptacles.
6.4 REFERENCE TO OTHER SECTIONS:	See section 8 for personal protective equipment.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING PROTECTIVE MEASURES:	The usual precautionary measures are to be adhered to when handling chemicals. Wear protective equipment. Keep unprotected persons away. Prevent formation of dust.
INFORMATION ABOUT FIRE- AND EXPLOSION PROTECTION:	The product is not combustible. Formation of toxic gases is possible during heating or in case of fire.
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: REQUIREMENTS TO BE MET BY STOREROOMS AND VESSELS:	Store in a cool location.
INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY:	Not required.
FURTHER INFORMATION ABOUT STORAGE CONDITIONS:	Keep container tightly sealed. Store in dry conditions.
7.3. SPECIFIC END USE(S):	Use as an intermediate.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROLS PARAMETERS: The usual precautionary measures are to be adhered to when handling chemicals.

DNELs	WORKERS				CONSUMERS			
	ACUTE EFFECT LOCAL	ACUTE EFFECT SYSTEMIC	CHRONIC EFFECT LOCAL	CHRONIC EFFECT SYSTEMIC	ACUTE EFFECT LOCAL	ACUTE EFFECT SYSTEMIC	CHRONIC EFFECT LOCAL	CHRONIC EFFECT SYSTEMIC
ROUTE OF EXPOSURE								
Oral	Not required				No hazard identified		Not required	No hazard identified
Inhalation	No hazard identified	No hazard identified	No hazard identified	1.3 mg/m ³	No hazard identified	No hazard identified	No hazard identified	0.3 mg/m ³
Dermal	No hazard identified	No hazard identified	No hazard identified	0.4 mg/kg bw/d	No hazard identified	No hazard identified	No hazard identified	No hazard identified

PNECs

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Freshwater	0.1 mg/L
Freshwater sediment	No hazard identified.
Marine water	0.01 mg/L
Marine sediment	No hazard identified.
Intermittent releases	1 mg/L
STP	65.16 mg/L
Soil	2.26 mg/kg soil dry weight
Air	No hazard identified.
Secondary poisoning	No potential for bioaccumulation.

8.2 EXPOSURE CONTROLS:

8.2.1 APPROPRIATE ENGINEERING CONTROLS: Provide adequate ventilation/exhaustion at the workplace.

8.2.2 PERSONAL PROTECTION: Wear personal protective equipment appropriate to the task (see below)

- a) **EYE PROTECTION:** Safety glasses.
- b) **SKIN PROTECTION:** Protective gloves (material: nitrile rubber, penetration time of glove material: >480 min, thickness of glove material: 0.11 mm)
- c) **RESPIRATORY PROTECTION:** Use respiratory protective device against the effects of fumes/dust/aerosol. Filter P3.
- d) **BODY PROTECTION:** Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE:	Solid, 80% of the mass of the compound made up of grains with a diameter of 0.175-0.35 mm.
COLOUR:	Colourless
ODOUR:	No data
PH:	5.3 (0.1%)
BOILING POINT AND BOILING RANGE:	Decomposes before boiling
MELTING/FREEZING POINT:	313 – 314 °C (decomposition temperature)
FLASH POINT:	Not applicable
FLAMMABILITY:	Non-flammable
EVAPORATION RATE:	Not available
VAPOUR PRESSURE:	Not applicable
DENSITY:	3.97 g/cm ³ at 20°C
WATER SOLUBILITY:	62,300 mg/L at 20°C
PARTITION COEFFICIENT: N-OCTANOL/WATER:	Not applicable
AUTO-IGNITION TEMPERATURE:	No significant signs of self-ignition or self-heating

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

DECOMPOSITION TEMPERATURE: 313 – 314 °C

VISCOSITY: Not applicable

EXPLOSIVE PROPERTIES: Non-explosive

OXIDISING PROPERTIES: Non-oxidising

9.2 OTHER INFORMATION:

SECTION 10. STABILITY AND REACTIVITY10.1 REACTIVITY: **TO BE ADDED BY COMPANY**10.2 CHEMICAL STABILITY: **TO BE ADDED BY COMPANY**10.3 POSSIBILITY OF HAZARDOUS REACTIONS: **TO BE ADDED BY COMPANY**

10.4 CONDITIONS TO AVOID: No decomposition is used according to specifications.

10.5 INCOMPATIBLE MATERIAL: **TO BE ADDED BY COMPANY**

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: No dangerous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: LD₅₀ rat (oral) > 2,000 mg/kg bw

SKIN IRRITATION OR CORROSION: Not irritating (rabbit).

SERIOUS EYE DAMAGE/IRRITATION: Not irritating (rabbit).

RESPIRATORY OR SKIN SENSITISATION: Not sensitising.

MUTAGENICITY: Not genotoxic.

CARCINOGENICITY: Not available.

REPEATED DOSE TOXICITY: NOAEL rat (oral) 110 mg/kg bw/d

REPRODUCTIVE TOXICITY: NOAEL rat (oral) 110 mg/kg bw/d

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

ACUTE TOXICITY:	Algae (OECD 201, <i>D. subspicatus</i>):	E-C50	72 h	139.57	mg/L
	Invertebrates (OECD 202, <i>D. magna</i>):	EC50	48 h	>100	mg/L
	Fish (OECD 203, <i>D. rerio</i>):	LC50	96 h	>100	mg/L
	Microorganisms (OECD 209, activated sludge):	EC50	3 h	>1000	mg/L

SECTION 12. ECOLOGICAL INFORMATION

CHRONIC TOXICITY:	Other organisms:	Not available.			
	Algae (OECD 201, <i>D. subspicatus</i>):	NOEC	72 h	50	mg/L
12.2 PERSISTENCE AND DEGRADABILITY:	Not applicable.				
12.3 BIOACCUMULATIVE POTENTIAL:	Not available.				
12.4 MOBILITY IN SOIL:	Kd = 22.5				
12.5 PBT/VPVB ASSESSMENT:	Not applicable.				
12.6 OTHER ADVERSE EFFECTS:					

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:	
13.1.1 PRODUCT DISPOSAL:	Contact manufacturer for recycling information. Disposal must be made according to official regulations.
13.1.2 PACKAGING DISPOSAL:	Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

14.1 UNITED NATIONS (UN) NUMBER:	Not classified for transport (ADR/RID, IMDG, ICAO/IATA)
14.2 UN PROPER SHIPPING NAME:	Not applicable (ADR/RID, IMDG, ICAO/IATA)
14.3 TRANSPORT HAZARD CLASS(S):	Not applicable (ADR/RID, IMDG, ICAO/IATA)
14.4 PACKING GROUP:	Not applicable (ADR/RID, IMDG, ICAO/IATA)
14.5 ENVIRONMENTAL HAZARDS:	The product should not be marked as a marine pollutant.
14.6 SPECIAL PRECAUTIONS FOR USER:	Not applicable (ADR/RID, IMDG, ICAO/IATA)
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:	Not applicable (ADR/RID, IMDG, ICAO/IATA)

SECTION 15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS:	The product is classified in accordance with EC Regulation 1272/2008 (CLP).
15.2 CHEMICAL SAFETY ASSESSMENT:	Not applicable

SECTION 16. OTHER INFORMATION

FURTHER INFORMATION:	The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP)
SOURCES OF DATA:	IUCLID dataset
DATE OF ISSUE:	xx-xx-xxxx