Safety data sheet

ChemiPURE Ammonium Persulfate (APS)

Product name ChemiPURE Ammonium Persulfate (APS)	Catalog no. APS10, APS25, APS100
Synonyms Ammonium peroxodisulfate; APS	SDS revision -
CAS no. 7727-54-0	Format version / date 3 / 24 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ChemiPURE Ammonium Persulfate (APS)
Product code	APS10 (10 g); APS25 (25 g); APS100 (100 g)
CAS number	7727-54-0
EC number	231-786-5
Recommended use	Laboratory reagent; free-radical initiator for polyacrylamide gel preparation and electrophoresis. Research use only.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. Ipekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10, Yakutiye, Erzurum, Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Ox. Sol. 3; Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Resp. Sens. 1; STOT SE 3 (respiratory tract).
Label elements	GHS03, GHS07, GHS08; signal word: Danger.
Symbols / pictograms	
Signal word	Danger
Hazard statements	H272 May intensify fire; oxidizer. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation.
Precautionary statements - Prevention	P220 Keep away from combustible materials. P261 Avoid breathing dust. P280 Wear protective gloves/clothing and eye/face protection.
Precautionary statements - Response	P302+P352 IF ON SKIN: Wash with water. P304+P340 IF INHALED: Move to fresh air. P305+P351+P338 IF IN EYES: Rinse cautiously with water; remove contact lenses if easy. P342+P311 If respiratory symptoms: Call a POISON CENTER/doctor.
Other hazards	Strong oxidizer; avoid contact with combustible materials and dust exposure.

Composition & response

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ChemiPURE Ammonium Persulfate (APS)
Synonyms	Ammonium persulfate; ammonium peroxodisulfate; diammonium peroxydisulfate
Concentration	≥98% (purity)
Formula	(NH4)2S2O8 (H8N2O8S2)
Molecular weight	228.20 g/mol
Mixture statement	Substance: ammonium persulfate (CAS 7727-54-0; EC 231-786-5), assay ≥98%. Remaining impurities are not individually specified.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately rinse cautiously with plenty of water, including under eyelids, for at least 15 minutes. Remove contact lenses if easy; obtain immediate medical advice.
Skin contact	Remove contaminated clothing. Wash thoroughly with water for at least 15 minutes. Obtain medical attention if symptoms develop or persist.
Inhalation	Move to fresh air. If breathing is difficult or allergy/asthma symptoms occur, seek immediate medical advice.
Ingestion	Rinse mouth; do not induce vomiting. Call a POISON CENTER or physician. Do not give anything by mouth to an unconscious person.
Self-protection of first aider	Avoid contact with dust; use appropriate gloves, eye/face and respiratory protection.
Most important symptoms / effects	Irritation of skin, eyes and respiratory tract; allergic skin reactions and breathing difficulties are possible.
Notes to physicians	Treat symptomatically; monitor for allergic respiratory reactions.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray. Use an adequate quantity of water for oxidizer involvement.
Unsuitable extinguishing media	Avoid extinguishing agents that can react with strong oxidizers; select method for surrounding fire.
Special hazards arising from the substance or mixture	Oxidizer; may intensify fire on contact with combustibles. Decomposition may release nitrogen oxides, sulfur oxides, ammonia and oxygen.
Explosion data	Dust and reactive mixtures can increase fire risk. No product-specific explosion limits available.
Advice for firefighters	Wear self-contained breathing apparatus and full protective clothing. Cool exposed containers with water spray from a safe distance.

Safe use & protection

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Avoid dust formation and inhalation. Isolate spill, ensure ventilation, and use protective gloves, eye/face protection and suitable respiratory protection.
Environmental precautions	Prevent discharge to drains, waterways and soil.
Methods and materials for containment and cleaning up	Keep combustibles away. Collect mechanically without generating dust into clean, compatible, tightly closed containers. Avoid contaminated absorbents.
Reference to other sections	See Sections 8 and 13.

07 HANDLING AND STORAGE

Precautions for safe handling	Keep away from heat, ignition sources and combustible/organic materials. Avoid breathing dust and contact with skin and eyes. Use suitable protective equipment.
Conditions for safe storage	Store at 15–25 °C in a tightly closed container, protected from light and air, away from combustibles. After opening, storage at 2–8 °C is recommended.
Container labeling	Keep in original or appropriately labelled, clean, tightly closed container; segregate from reducing agents and combustibles.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Control airborne dust exposure; follow applicable national occupational exposure limits and local risk assessment.

8.2 Exposure controls

Engineering measures	Provide local exhaust ventilation when generating dust; eyewash and safety shower should be readily accessible.
Hygiene measures	Do not eat, drink or smoke during use. Wash hands and exposed skin after handling; remove contaminated clothing.
Eye / face protection	Wear chemical splash goggles or safety glasses meeting EN 166; face protection as needed.
Hand protection	Wear suitable chemical-resistant protective gloves (EN 374 or equivalent).
Skin and body protection	Wear laboratory coat, appropriate protective clothing and closed footwear.
Respiratory protection	For significant dust exposure or insufficient ventilation, wear a suitable particle-filtering respirator.

Material properties

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09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White crystalline powder (solid)
Odor	Odorless
Odor threshold	No data available
pH	Approximately 3.2 (100 g/L aqueous solution)
Melting point / freezing point	Approx. 120 °C (decomposes)
Initial boiling point and boiling range	Not available; decomposes upon heating
Flash point	Not applicable (inorganic solid)
Evaporation rate	Not applicable (solid)
Flammability (solid, gas)	Not combustible; oxidizing solid
Upper / lower flammability or explosive limits	No data available
Vapor pressure	Negligible under ambient conditions
Vapor density	Not applicable (solid)
Relative density	1.982 g/cm³ at 20 °C
Solubility(ies)	Water: approximately 582 g/L at 20 °C (may decompose)
Partition coefficient: n-octanol / water	Not applicable to inorganic salt
Auto-ignition temperature	No data available
Decomposition temperature	Above approximately 120 °C
Viscosity	Not applicable (solid)
Explosive properties	No data available
Oxidizing properties	Oxidizing solid, Category 3 (H272)

10 STABILITY AND REACTIVITY

Reactivity	Strong oxidizing substance; may react vigorously with combustible and reducing materials.
Chemical stability	Stable under recommended conditions; moisture-sensitive and decomposes upon heating.
Possibility of hazardous reactions	Contact with combustible/organic materials may cause or intensify fire.
Conditions to avoid	Heat, moisture, contamination, dust formation and incompatible materials.
Incompatible materials	Combustibles, reducing agents, metals, strong acids and alkalis.
Hazardous decomposition products	Nitrogen oxides, sulfur oxides, ammonia and oxygen may be released on heating/decomposition.

Health & environment

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Acute oral toxicity, Category 4 (H302). Oral LD50 (rat): approximately 495 mg/kg.
Skin corrosion / irritation	Skin irritation, Category 2 (H315); may cause allergic skin reaction (H317).
Serious eye damage / eye irritation	Eye irritation, Category 2 (H319).
Carcinogenicity	Based on available data, classification criteria are not met.
Reproductive toxicity	Based on available data, classification criteria are not met.
STOT - SE	Category 3 (respiratory irritation), H335; respiratory sensitization Category 1 (H334).
STOT - RE	Based on available data, classification criteria are not met.
Aspiration hazard	Not applicable (solid).

11.2 Potential health effects

Ingestion: Harmful if swallowed.
Inhalation: May cause allergy/asthma symptoms or respiratory irritation.
Skin: Causes irritation and may cause allergic skin reaction.
Eyes: Causes serious eye irritation.

11.3 Additional information

Symptoms of sensitization may include rash, itching, wheezing or breathing difficulty.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50 (96 h): 76.3 mg/L (Oncorhynchus mykiss); Daphnia EC50 (48 h): 120 mg/L. Prevent release to water.
Persistence and degradability	Not relevant for inorganic substances; persistence in water is unlikely.
Bioaccumulative potential	Bioaccumulation is unlikely.
Mobility in soil	Highly mobile in water and soil due to high water solubility.
Results of PBT and vPvB assessment	PBT/vPvB assessment is not required for inorganic substances under REACH Annex XIII.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of as hazardous laboratory chemical waste through an approved waste service. Do not discharge into drains or mix with combustibles.
Contaminated packaging	Dispose of as hazardous/special waste in accordance with local requirements. Do not reuse containers.

Transport & reference

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14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	1444	AMMONIUM PERSULPHATE	5.1	III	No
IMDG	1444	AMMONIUM PERSULPHATE	5.1	III	No
IATA	1444	AMMONIUM PERSULPHATE	5.1	III	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Ammonium persulfate: CAS 7727-54-0; EC 231-786-5; Index 016-060-00-6.
Environmental hazards	Not classified as a marine pollutant for transport. Avoid environmental release.
Chemical safety assessment	No EcoTech product-specific chemical safety assessment available.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail