Safety data sheet

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98%

Product name ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98%	Catalog no. SDP205, SDP210
Synonyms Sodium phosphate monobasic dihydrate	SDS revision -
CAS no. 13472-35-0	Format version / date 3 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98%
Product code	SDP205, SDP210
CAS number	13472-35-0
EC number	231-449-2
Recommended use	For research use only. Laboratory reagent for phosphate buffer preparation, analytical, biochemical and molecular biology applications.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu 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	Not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP).
Label elements	No hazardous label elements required.
Symbols / pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements - Prevention	Avoid inhaling dust. Wear safety glasses and appropriate laboratory gloves; wash hands after handling.
Precautionary statements - Response	Rinse exposed skin or eyes with water. Obtain medical advice if irritation or other symptoms persist.
Other hazards	Dust may cause temporary irritation of eyes, skin or respiratory tract after excessive exposure.

Composition & response

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98% | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98%
Synonyms	Sodium phosphate monobasic dihydrate; monosodium phosphate dihydrate; sodium dihydrogen orthophosphate dihydrate
Concentration	≥98% (purity)
Formula	$NaH_2PO_4 \cdot 2H_2O$
Molecular weight	156.01 g/mol
Mixture statement	Substance: sodium dihydrogen phosphate dihydrate (CAS 13472-35-0; EC 231-449-2), purity ≥98%. No CLP-classified hazardous ingredients identified at the stated grade. Trace impurity profile is not available.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse eyes cautiously with water for several minutes, including beneath eyelids. Remove contact lenses if possible. Obtain medical advice if irritation continues.
Skin contact	Wash skin with plenty of water. Remove contaminated clothing. Seek medical advice if irritation occurs.
Inhalation	Move to fresh air and keep comfortable for breathing. Obtain medical advice if symptoms persist.
Ingestion	Rinse mouth with water. Do not induce vomiting. If unwell, contact a medical professional.
Self-protection of first aider	Wear appropriate personal protective equipment and avoid inhalation of dust.
Most important symptoms / effects	Excessive dust exposure may irritate eyes, skin and respiratory tract; serious effects are not expected under normal handling.
Notes to physicians	Treat symptomatically.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing agents suitable for the surrounding fire: water spray, alcohol-resistant foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Avoid a direct, high-pressure water jet that could spread material.
Special hazards arising from the substance or mixture	Non-flammable solid. High temperatures or fire may release irritating fumes including phosphorus oxides.
Explosion data	Not classified as explosive; no unusual impact or static-discharge sensitivity is known.
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing. Prevent fire-fighting runoff entering waterways.

Safe use & protection

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98% | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Provide ventilation. Avoid generating and inhaling dust. Wear eye protection, gloves and protective clothing.
Environmental precautions	Avoid uncontrolled release to drains and surface waters.
Methods and materials for containment and cleaning up	Collect dry material mechanically with minimal dust generation and place in a labelled, sealed container. Clean residue with water as appropriate.
Reference to other sections	See Sections 8 and 13 for exposure controls and disposal guidance.

07 HANDLING AND STORAGE

Precautions for safe handling	Avoid dust formation, inhalation and eye contact. Apply standard laboratory hygiene and wash hands after handling.
Conditions for safe storage	Store at 15–25 °C in a tightly closed container, in a dry, ventilated place. Protect from moisture and excessive heat.
Container labeling	Store in correctly labelled, compatible containers; retain the original identification label.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No substance-specific occupational exposure limits have been established for sodium dihydrogen phosphate dihydrate.

8.2 Exposure controls

Engineering measures	Maintain good general ventilation; use local exhaust if dust is generated.
Hygiene measures	Do not eat, drink or smoke in work areas. Wash hands after handling and before breaks.
Eye / face protection	Safety glasses with side protection or goggles in accordance with EN 166.
Hand protection	Wear suitable protective gloves, such as nitrile gloves; inspect before use.
Skin and body protection	Wear a laboratory coat and suitable protective clothing.
Respiratory protection	Normally not required with adequate ventilation. Use an appropriate particulate respirator, e.g. P1, if dusty conditions occur.

Material properties

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98% | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White crystalline powder or crystalline solid
Odor	Odorless
Odor threshold	Not applicable (odorless)
pH	Approx. 4.2–4.5 (5% aqueous solution)
Melting point / freezing point	Approx. 60 °C (reported melting/dehydration point)
Initial boiling point and boiling range	No data available
Flash point	Not applicable (non-flammable inorganic solid)
Evaporation rate	Not applicable (solid)
Flammability (solid, gas)	Non-flammable
Upper / lower flammability or explosive limits	Not applicable
Vapor pressure	No data available
Vapor density	Not applicable (solid)
Relative density	Approx. 1.915 (relative density at 20 °C)
Solubility(ies)	Soluble in water; approx. 850 g/L at 20 °C
Partition coefficient: n-octanol / water	Not applicable for inorganic salts
Auto-ignition temperature	Not applicable (non-flammable)
Decomposition temperature	No data available
Viscosity	Not applicable (solid)
Explosive properties	Not classified as explosive
Oxidizing properties	Not classified as oxidizing

10 STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal ambient conditions when stored tightly closed and dry.
Possibility of hazardous reactions	No hazardous reaction expected under normal conditions.
Conditions to avoid	Avoid excessive heating and exposure to moisture.
Incompatible materials	No specific incompatible materials identified; avoid strongly reactive chemicals as a general precaution.
Hazardous decomposition products	High-temperature decomposition may generate phosphorus oxides.

Health & environment

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98% | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Not classified for acute toxicity. Reported LD50: oral (rat) 8,290 mg/kg; dermal (rabbit) >7,940 mg/kg.
Skin corrosion / irritation	Not classified; dust may cause temporary mechanical irritation.
Serious eye damage / eye irritation	Not classified; dust may cause temporary mechanical eye irritation.
Carcinogenicity	Not classified as carcinogenic.
Reproductive toxicity	Not classified for reproductive toxicity.
STOT - SE	Not classified for specific target organ toxicity after single exposure.
STOT - RE	Not classified for specific target organ toxicity after repeated exposure.
Aspiration hazard	Not applicable to a solid substance.

11.2 Potential health effects

Ingestion: Usually no significant effects are expected; large amounts may cause gastrointestinal discomfort.
Inhalation: Excessive dust may cause temporary respiratory irritation.
Skin: Dust may cause mild mechanical irritation.
Eyes: Dust may cause temporary mechanical irritation.

11.3 Additional information

No further product-specific toxicological information is available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Not classified as hazardous to the aquatic environment; reported fish LC50 >2,400 mg/L (48 h).
Persistence and degradability	No specific data available; biodegradability is generally not applicable to inorganic salts.
Bioaccumulative potential	No specific data available; the product is an inorganic salt.
Mobility in soil	No data available.
Results of PBT and vPvB assessment	No substance-specific PBT/vPvB assessment available; inorganic substances are generally outside the usual PBT/vPvB assessment scope.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of unused chemical through an authorised chemical waste route in accordance with local and national regulations. Avoid discharge of bulk material to drains.
Contaminated packaging	Dispose of in accordance with applicable local requirements; do not reuse contaminated containers.

Transport & reference

ChemiPURE Sodium Dihydrogen Phosphate Dihydrate, ≥98% | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	-	Not regulated	-	-	No
IMDG	-	Not regulated	-	-	No
IATA	-	Not regulated	-	-	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Sodium dihydrogen phosphate dihydrate (CAS 13472-35-0; EC 231-449-2) does not require CLP hazard labelling. Not listed on REACH Annex XIV or the candidate SVHC list.
Environmental hazards	Not classified as hazardous to the aquatic environment under CLP.
Chemical safety assessment	No product-specific chemical safety assessment has been carried out.

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