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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Sodium Propionate Food Grade	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Sodium Propionate Food Grade
Synonyms	SODIUM PROPIONATE; 137-40-6; Sodium propanoate; Propionic acid sodium salt; Propanoic acid, sodium salt; Napropion
CAS No.	137-40-6
EC No.	205-290-4
Molecular formula	CH3CH2COONa / C3H5NaO2
Molecular weight	96.06 g/mol
Relevant identified uses	Food additive E281 / preservative; Food and feed preservation
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	0086 21 5017 5386
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Website	www.richest-group.com
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SECTION 2: Hazards identification

GHS Classification	No hazard classification according to UN GHS criteria
Pictogram(s)	None
Signal word	None
Hazard statement(s)	No data available
Precautionary statement(s)	No data available
Other hazards	No significant adverse effects were observed in rats during long term feeding studies; Oral LD50 (mouse) = 6332 mg/kg; [HSDB] An eye and respiratory tract irritant; [ICSC] An eye and mild skin irritant; [eChemPortal: ERMA] May cause irritation; [MSDSonline]

SECTION 3: Composition/information on ingredients

Component	Sodium Propionate Food Grade
CAS No.	137-40-6
EC No.	205-290-4
Classification	No hazard classification according to UN GHS criteria
Concentration	99.0-100.5% on dry basis

SECTION 4: First-aid measures	
If inhaled	Move the person to fresh air and keep comfortable for breathing. Get medical advice if symptoms occur.
In case of skin contact	Wash with plenty of water. Remove contaminated clothing. Get medical advice if irritation occurs.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation persists.
If swallowed	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Get medical advice if symptoms occur.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Use water in large amounts; Merck P5436 SDS also lists foam, carbon dioxide and dry powder
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.
Advice for firefighters	Use water in large amounts.

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

SECTION 7: Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation or inhalation of dust, mist or vapour as applicable. Wash thoroughly after handling.
Conditions for safe storage, including incompatibilities	Dry. Well closed.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	No data available
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Provide adequate ventilation. Eyewash facilities should be available where contact is possible.
Eye/face protection	Use safety eyewear appropriate to the risk of exposure.
Skin and body protection	Wear suitable protective gloves and clothing appropriate to the risk of exposure.

SECTION 8: Exposure controls/personal protection

Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	White powder or granules; ICSC describes a hygroscopic white crystalline powder.
Colour	Colorless, crystalline solid
Odour	ODORLESS, OR HAS FAINT ACETIC-BUTYRIC ODOR
Melting point / freezing point	210 °C
Boiling point / boiling range	>500 °C at 1013.25 hPa (OECD Test Guideline 103)
Flammability	Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.
Explosion / flammability limits	No data available
Flash point	>250 °C o.c.
Auto-ignition temperature	Does not ignite (Merck P5436 SDS; detailed test conditions not stated)
Decomposition temperature	No data available
pH	7,5-10,5 (10 % aqueous solution)
Viscosity	Not applicable to the neat solid; solution viscosity depends on concentration, temperature and test method.
Solubility	100 g/100 mL (good)
Partition coefficient n-octanol/water	log Pow <0.3 at 20 °C (n-octanol/water, OECD Test Guideline 117)
Vapour pressure	<0.1 hPa at 20 °C (OECD Test Guideline 104)
Density and/or relative density	1.51 g/cm3 at 20 °C (OECD Test Guideline 109)
Relative vapour density	No data available
Particle characteristics	White powder or granules; ICSC describes a hygroscopic white crystalline powder.

SECTION 10: Stability and reactivity

Reactivity	Finely distributed dust may present a dust-explosion potential; aqueous solution is weakly basic
Chemical stability	Annie Chemie SDS: stable under ordinary conditions of use and storage; avoid strong oxidants. Hazardous decomposition products include carbon monoxide and carbon dioxide; hazardous polymerisation will not occur.
Possibility of hazardous reactions	Violent reactions are possible with strong oxidizing agents
Conditions to avoid	NO open flames. PREVENT DISPERSION OF DUST. Prevent build-up of electrostatic charges (e.g., by grounding).
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	When heated to decomposition it emits toxic fumes of /disodium oxide/.

SECTION 11: Toxicological information	
Acute toxicity	LD50 Mouse oral 6332 mg/kg; LD50 Mouse sc 2100 mg/kg; LD50 Rabbit skin 1640 mg/kg
Health effects	No significant adverse effects were observed in rats during long term feeding studies; Oral LD50 (mouse) = 6332 mg/kg; [HSDB] An eye and respiratory tract irritant; [ICSC] An eye and mild skin irritant; [eChemPortal: ERMA] May cause irritation; [MSDSonline]
Skin corrosion irritation	A reconstructed human epidermis test explicitly identified as read-across to unlabelled Sodium Propionate showed no skin irritation after 42 min of exposure (OECD 439). EFSA 2024 assessed a feed additive containing at least 98.5% Sodium Propionate as corrosive to the skin, eyes, and respiratory tract; the test and regulatory assessment conclusions differ, and the SDS for the corresponding product and use should be followed.
Serious eye damage irritation	An in vitro eye test explicitly identified as read-across to unlabelled Sodium Propionate was determined to cause serious eye irritation after 6 h (OECD 492). The Annie Chemie SDS classifies the product as Eye Irritation Category 2B (H320), whereas EFSA 2024 describes the additive as corrosive to the eyes.
Sensitization	A Direct Peptide Reactivity Assay (DPRA) explicitly identified as read-across to unlabelled Sodium Propionate was negative (OECD 442C); EFSA 2024 also states that this Sodium Propionate feed additive is not a skin sensitiser.
Carcinogenicity	The Annie Chemie SDS states that no components present at ≥0.1% are identified by IARC, ACGIH, OSHA, or NTP as possible or confirmed human carcinogens; this is not a statement of a negative long-term carcinogenicity study.
Toxicological summary	Acute oral toxicity in rats is low, but higher concentrations of the additive may cause local corrosion/irritation of the skin, eyes, and respiratory tract. Safe use depends primarily on dust and aerosol control, and local hazards cannot be judged solely on the basis of a high oral LD50.

SECTION 12: Ecological information	
Ecotoxicity	Pimephales promelas 96 h LC50 4,740 mg/L (Annie Chemie SDS). Additional OECD data explicitly identified as read-across to unlabelled Sodium Propionate: Daphnia magna 48 h immobilization EC50 >100 mg/L (static, OECD 202, GLP, with analytical monitoring); Pseudokirchneriella subcapitata 72 h ErC50 >80.6 mg/L (static, OECD 201, GLP, with analytical monitoring). The latter two entries are read-across data for unlabelled sodium propionate taken from the SDS for an isotopically labelled product, not newly estimated values.
Persistence degradability	An aerobic activated-sludge test explicitly identified as read-across to unlabelled Sodium Propionate: initial concentration 4.4 mg/L, 92.9% biodegradation in 28 d, OECD 301D and GLP, determined to be readily biodegradable.
Bioaccumulative potential	LogPow <0.3 (20 °C, OECD 117, GLP); on this basis, the SDS concludes that bioaccumulation is not expected.
Mobility in soil	Water solubility 500 g/L (20 °C, OECD 105). Combined with LogPow <0.3, relatively high mobility in the aqueous phase is qualitatively expected; no measured Koc for this substance was identified, so no quantitative soil mobility coefficient is provided.
Other adverse effects	EFSA 2024 confirms that use under the currently authorised feed uses and conditions is safe for target animals, consumers, and the environment; this conclusion is limited to the authorised uses and does not mean that concentrated product may be discharged directly into water bodies.

SECTION 13: Disposal considerations

Product disposal methods	SRP: At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	No data available
Special precautions for user	Keep containers closed and secured during transport. Follow local transport requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	No data available

SECTION 16: Other information

Full text of H-Statements	No data available
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: PubChem Sodium Propionate (CID 2723816): https://pubchem.ncbi.nlm.nih.gov/compound/2723816 | Sodium Propionate — Safety Data Sheet: https://www.anniechemie.com/sodiumpropionateSDS.html | Sodium Propionate — Safety Data Sheet, Product P5436: https://nextsds.com/sds/en/281331501300343/sodium-propionate | Sodium propionate-1,2-13C2 — Safety Data Sheet (explicitly identifying the ecological data as read-across to unlabelled Sodium propionate): https://www.chemicalbook.com/msds/sodiumpropionate-12-13c2.htm | Assessment of the feed additive consisting of sodium propionate for all terrestrial animal species for the renewal of its authorisation: https://www.efsa.europa.eu/en/efsajournal/pub/8938 | ICSC 0557 - Sodium Propionate: https://www.inchem.org/documents/icsc/icsc/eics0557.htm
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.