

Safety Data Sheet

#49426832 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
D-(+)-Arabinitol	488-82-4	C5H12O5	10	21 Jul 2026

SECTION 1

Identification

Product name	D-(+)-Arabinitol
CAS number	488-82-4
Chemical formula	C5H12O5
Molecular weight	152.15
SMILES	C([C@H](C([C@@H](CO)O)O)O)O
EC / EINECS number	207-686-2
Recommended use & restrictions	For research use only.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

NONE

CODE	PRECAUTIONARY STATEMENT
P280	Wear protective gloves/protective clothing/eye protection/face protection
Other hazards (e.g. PBT / vPvB, not classified)	This substance does not meet PBT or vPvB criteria under REACH Annex XIII

SECTION 3

Composition / information on ingredients

Purity / concentration	100%
Impurities / stabilising additives	None

SECTION 4

First-aid measures

Inhalation	Remove to fresh air; give oxygen/artificial respiration if breathing difficulties persist. Seek medical attention if needed.
Skin contact	Remove contaminated clothing immediately; wash skin with plenty of water. Consult a doctor if irritation persists.
Eye contact	Rinse immediately with water for at least 15 minutes. Remove contact lenses if present. Seek medical attention if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting. Seek medical attention.
Symptoms / effects & medical attention	Dust may cause respiratory irritation (inhalation), skin irritation (prolonged contact), eye irritation (redness, itching), or digestive tract irritation (nausea, abdominal pain).

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, dry powder, carbon dioxide, water spray, sand. Water spray
Unsuitable extinguishing media	None known
Special hazards	Carbon oxides (CO, CO ₂) on decomposition
Advice for firefighters	Keep container closed; cool exposed containers with water spray. Use proper protective equipment (respiratory protection). Warn of toxic hazards.

SECTION 6

Accidental release measures

Personal precautions & PPE	Isolate area; avoid dust formation. Use self-contained breathing apparatus and chemically protective clothing for cleanup.
Environmental precautions	Prevent entry into sewers/waterways. Notify authorities if contamination occurs.
Containment & clean-up methods	Sweep/shovel into containers for disposal. Ventilate area thoroughly.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Avoid dust formation; provide local exhaust ventilation. Do not eat, drink, or smoke during use.
Conditions for safe storage (incompatibilities)	Keep in original container, away from heat, direct sunlight, and ignition sources. Store in a dry, closed container.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *No data available*

DNEC/PNEC data *No data available*

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Long-sleeved protective clothing (EN ISO 13982) and nitrile rubber gloves (0.11 mm, EN 374).

For personal protection standards, see section 16.

Respiratory protection Not required
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL) *Not applicable*

Flash point *Not applicable*

Acidity Neutral
DERIVED FROM: LITERATURE

Appearance / physical state Powder
DERIVED FROM: LITERATURE

Colour White to off-white
DERIVED FROM: LITERATURE

Odour Odourless
DERIVED FROM: LITERATURE

Melting / freezing point -
DERIVED FROM: LITERATURE

Boiling point -
DERIVED FROM: LITERATURE

Solubility (water) *No data available*

pH -
DERIVED FROM: LITERATURE

Vapour pressure -
DERIVED FROM: LITERATURE

Partition coefficient (log Pow) -
DERIVED FROM: LITERATURE

Auto-ignition / decomposition temp Non-flammable; no data on decomposition temperature.
DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under recommended handling and storage conditions.
Conditions to avoid	Heat, sparks, open flames, direct sunlight
Incompatible materials	Strong oxidizers.
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Not classified (oral, dermal, inhalation).
Skin corrosion / irritation	May cause skin irritation (dust in skin folds or with tight clothing)
Eye corrosion / irritation	May cause eye irritation (redness, itching, tearing)
Respiratory / skin sensitisation	Not classified.
Carcinogenicity	Not classified (mutagenicity, carcinogenicity, reproductive toxicity).
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	Not classified (single/repeated exposure).
Aspiration hazard	Not classified.
Endocrine disruptors	Not classified.

SECTION 12

Ecological information

Aquatic toxicity	Not classified (acute/chronic aquatic).
Persistence & degradability	<i>Not applicable</i>
Bioaccumulative potential	<i>Not applicable</i>
Mobility in soil	<i>Not applicable</i>
PBT / vPvB assessment	Not PBT/vPvB under REACH Annex XIII

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of as hazardous waste or according to local regulations
---	---

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Not applicable

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not listed on REACH Candidate List or Annex XVII.
Chemical safety assessment carried out?	Not applicable

SECTION 16

Other information

Revision notes / other information	Eye/face protection complies with EN ISO 16321-1:2022.
------------------------------------	--

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.