SAFETY DATA SHEET

according to Regulation (EC) No 1272/2008 (CLP)

2-Naphthoxyacetic acid 98% TC

Shanghai Bosman Industrial Co., Limited

Product name	**2-Naphthoxyacetic acid 98% TC**	SDS number	**BM-SDS-0218**
Version	**3.0**	Revision date	**03 November 2026**
Supersedes	**Version 2.1**	Print date	**03 November 2026**
Language	**EN**	Format	**GHS / CLP - 16 sections**

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

1.1 Product identifier

Trade name	2-Naphthoxyacetic acid 98% TC
Product type	Technical material (TC) - plant growth regulator
Active substance	2-Naphthoxyacetic acid (CAS 120-23-0)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use	Plant growth regulator used as a raw material for the manufacture of formulated products and, where authorised, for the promotion of fruit set and the prevention of pre-harvest fruit drop. For industrial and professional use only.
Uses advised against	Any use other than the identified use. Not for domestic or residential use. Do not use on crops or sites not stated on the label.

1.3 Details of the supplier of the safety data sheet

Supplier	Shanghai Bosman Industrial Co., Limited
Address	No. 1611, North Sichuan Road, Hongkou District, Shanghai 200080, P.R. China
Telephone	+86 21 6306 5878
Fax	+86 21 6091 1557
E-mail	info@bosmangroup.com
Website	www.bosmangroup.com

1.4 Emergency telephone number

24-hour emergency line	+86 21 6356 6528 (Shanghai Bosman Industrial Co., Limited, 24 h)
Poison centre	Contact your local poisons information centre or emergency services (e.g. 120 in mainland China) in case of poisoning.

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP), Annex I.

H302	Acute toxicity, oral, Category 4 — Harmful if swallowed.

2.2 Label elements



SIGNAL WORD
WARNING

H302	Harmful if swallowed.

Precautionary statements - Prevention

P264	Wash hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Precautionary statements - Response

P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.

Precautionary statements - Disposal

P501	Dispose of contents and container to a licensed hazardous-waste contractor.

2.3 Other hazards

This substance contains no component considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at a concentration of 0.1 % (w/w) or higher. Dust clouds may form an explosive mixture with air when dispersed.

This mixture does not contain any substance that is identified as having endocrine-disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100, at a concentration of 0.1 % (w/w) or higher.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable - this product is a mixture.

3.2 Mixtures

Component	CAS No.	EC No.	Concentration	Classification (CLP)
2-Naphthoxyacetic acid	120-23-0	204-380-0	98 % w/w (minimum)	Acute Tox. 4 (H302)
Related phenoxyacetic acids and water	-	-	≤ 2 % w/w	Not classified as hazardous at the concentration present

The purity is the minimum content of active substance declared on the specification. The identity of the impurities is defined in the product specification and is available to the competent authorities on request.

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice Move the person out of the contaminated area. Show this safety data sheet to the doctor in attendance. Never give anything by mouth to an unconscious person.

After inhalation Move the person into fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

After skin contact Take off all contaminated clothing immediately. Wash the skin thoroughly with soap and plenty of water. If skin irritation or a rash develops, seek medical advice.

After eye contact Rinse cautiously with water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation develops.

After ingestion Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion may cause gastrointestinal irritation, nausea, vomiting and abdominal pain. Dust may irritate the eyes and the respiratory tract. No systemic effects have been reported in humans.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. No specific antidote is known. Gastric lavage may be considered after a substantial recent ingestion, under medical supervision. Monitor electrolyte balance if vomiting is prolonged.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable media	Water spray, foam, dry chemical powder or carbon dioxide.
Unsuitable media	Do not use a solid water stream - it may scatter and spread the fire.

5.2 Special hazards arising from the substance or mixture

On heating, the product decomposes and releases carbon oxides and irritating fumes. Dust dispersed in air may form an explosive mixture. Fire water run-off may be hazardous to the aquatic environment.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing. Contain fire water run-off; do not allow it to enter drains or watercourses. Cool closed containers with water spray. Collect contaminated fire-fighting water separately.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear the personal protective equipment specified in Section 8. Avoid breathing vapour, mist or spray. Avoid contact with skin and eyes. Ensure adequate ventilation. Remove all sources of ignition where the product is flammable.

6.2 Environmental precautions

Do not allow the product to enter drains, sewers, watercourses or groundwater. Prevent the material from spreading. Notify the relevant authorities if the product has entered a watercourse or sewer, or has contaminated soil or vegetation.

6.3 Methods and material for containment and cleaning up

Sweep up the material without raising dust, using a dampened broom or a vacuum cleaner fitted with a HEPA filter, and place it in a labelled, closed container for disposal. Wash the contaminated surface with water and detergent; collect the washings for disposal.

6.4 Reference to other sections

See Section 8 for personal protection and Section 13 for disposal.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

- Use local exhaust ventilation to control dust generation at the point of handling.
- Avoid breathing dust and avoid contact with skin and eyes.
- Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling.
- Prevent the formation and accumulation of dust; provide adequate ventilation and eliminate sources of ignition where dust clouds may occur.
- Use non-sparking tools and grounded equipment for powder handling.

7.2 Conditions for safe storage, including any incompatibilities

- Store in the tightly closed original container in a cool, dry, well-ventilated place.
- Keep away from sources of ignition, heat and direct sunlight.
- Store separately from food, drink, feed and seed, and out of reach of children.
- Keep away from strong oxidising agents and strong alkalis.
- Protect from moisture; the material is hygroscopic.

7.3 Specific end use(s)

Plant growth regulator used as a raw material for the manufacture of formulated products and, where authorised, for the promotion of fruit set and the prevention of pre-harvest fruit drop. For industrial and professional use only.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Component	Limit value	Type	Basis
2-Naphthoxyacetic acid	Not established	-	no binding OEL in the European Union
Inhalable dust (nuisance)	10 mg/m³	TWA (8 h)	ACGIH; national OEL to be verified

Where no substance-specific limit exists, the national limit for inhalable dust applies.

8.2 Exposure controls

Provide local exhaust ventilation at points of dust generation and adequate general ventilation. Handle the powder in closed systems where practicable. Provide an eyewash station and safety shower in the immediate work area.

Protective equipment	Requirement
Respiratory protection	Where dust is generated and ventilation is inadequate, wear a particulate respirator (type P2 or FFP2, EN 149).
Hand protection	Chemical-resistant protective gloves (nitrile rubber, minimum thickness 0.3 mm).
Eye protection	Safety goggles (EN 166) where dust or splash exposure is possible.
Skin and body	Long-sleeved protective clothing and safety footwear. Remove and wash contaminated clothing before reuse.
Hygiene measures	Wash hands, forearms and face thoroughly with soap and water after handling and before eating, drinking or smoking. Shower at the end of the shift.

Do not allow the product to come into contact with food, drink or feed. Contaminated clothing should be removed immediately and laundered before reuse. Employees should be informed about the hazards of the product and trained in its safe handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Property	Value
Physical state	Solid (powder, crystalline flakes)
Colour	White to off-white
Odour	Odourless to faint
Odour threshold	Not determined
pH	Not applicable (poorly soluble acid); a 1 % suspension is acidic
Melting point	Approx. 155 - 158 °C (OECD 102)
Boiling point	Not determined (decomposes before boiling)
Flash point	Not applicable (solid)
Flammability	Combustible solid; dust may form an explosive mixture with air
Vapour pressure	< 0.01 Pa at 20 °C (estimated)
Bulk density	Not determined
Solubility in water	Sparingly soluble; approx. 0.3 g/L at 20 °C
Solubility in organic solvents	Soluble in ethanol, acetone and dimethyl sulfoxide
Partition coefficient (log Pow)	Approx. 2.5 at 25 °C (estimated)
Auto-ignition temperature	Not determined
Decomposition temperature	Decomposes above 250 °C
Explosive properties	Not explosive; dust explosion hazard cannot be excluded

Property	Value
Oxidising properties	Not oxidising (assessment by structure)

9.2 Other information - no additional information available.

10 STABILITY AND REACTIVITY

10.1 Reactivity
No hazardous reaction is known under the recommended conditions of storage and use.

10.2 Chemical stability
Stable for at least two years when stored in the closed original container in a dry, well-ventilated place.

10.3 Possibility of hazardous reactions
No hazardous polymerisation occurs.

10.4 Conditions to avoid
Heat, open flames, sparks, dust clouds, moisture and direct sunlight.

10.5 Incompatible materials
Strong oxidising agents, strong alkalis and strong reducing agents.

10.6 Hazardous decomposition products
Thermal decomposition releases carbon oxides and irritating fumes.

11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Endpoint	Result	Species / basis
Acute oral toxicity	LD50 600 mg/kg (rat)	Acute Tox. 4 (H302)
Acute dermal toxicity	No data available	not classified on the available data
Acute inhalation toxicity	No data available	not classified on the available data
Skin corrosion / irritation	No data available	not classified on the available data
Serious eye damage / irritation	No data available	not classified on the available data
Respiratory or skin sensitisation	No data available	not classified on the available data
Germ cell mutagenicity	No data available	not classified on the available data
Carcinogenicity	No data available	not classified on the available data
Reproductive toxicity	No data available	not classified on the available data
STOT - single exposure	No data available	not classified on the available data
STOT - repeated exposure	No data available	not classified on the available data
Aspiration hazard	No data available	not classified

11.2 Symptoms and effects
See Section 4.2. No systemic toxicity data are available for humans.

11.3 Other information
The classification is a self-classification based on the acute oral toxicity of the substance. Endpoints for which no test data are available have not been classified, in accordance with Article 6 of Regulation (EC) No 1272/2008. The substance is not listed in Annex VI to that Regulation.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Organism	Result	Test condition
Fish, acute	No data available	not classified on the available data
Aquatic invertebrates	No data available	not classified on the available data
Algae	No data available	not classified on the available data
Bees	No data available	-
Birds	No data available	-

12.2 Persistence and degradability

No data available. The substance is not expected to be readily biodegradable.

12.3 Bioaccumulative potential

No data available. The estimated log Pow of 2.5 indicates a low to moderate potential for bioaccumulation.

12.4 Mobility in soil

The substance is sparingly soluble in water and is expected to be moderately mobile in soil.

12.5 Results of PBT and vPvB assessment

No data available. The substance is not considered to be PBT or vPvB.

12.6 Endocrine disrupting properties

No endocrine-disrupting properties are identified in accordance with the criteria of Commission Delegated Regulation (EU) 2017/2100.

12.7 Other adverse effects

Do not allow the product to reach surface water, groundwater or drains.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of surplus product and contaminated packaging as hazardous waste through a licensed contractor. Do not contaminate water, food or feed by disposal. Comply with national and local waste legislation.

- Do not contaminate ponds, watercourses or ditches with the product or the empty container.
- Dispose of surplus product and non-recyclable packaging through a licensed hazardous-waste contractor, in accordance with national and local regulations.
- Empty containers retain product residues and vapour; observe all label safeguards until the container has been cleaned and destroyed.
- Triple-rinse emptied containers and add the rinsings to the spray tank; then puncture or crush and offer for recycling where facilities exist.

14 TRANSPORT INFORMATION

Parameter	ADR / RID	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
Proper shipping name	Not regulated for transport	Not regulated for transport	Not regulated for transport
Class	-	-	-
Packing group	-	-	-
Environmental hazard	No	No	No
Tunnel code	-	-	-
EmS / Special	-	-	-

14.6 Special precautions for user

The product is not classified as dangerous for transport. Observe good housekeeping practice; keep containers closed and secure the load.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable - the product is transported in packaged form only.

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).
- Regulation (EC) No 1907/2006 (REACH). The substance is registered under REACH; no Annex XVII restriction applies to its industrial use.
- 2-Naphthoxyacetic acid is not approved as an active substance in the European Union under Regulation (EC) No 1107/2009; it may only be used as a technical material for export or for uses outside the scope of that Regulation.
- Directive 2008/98/EC on waste and national implementing legislation.
- National legislation implementing the above instruments in the country of use applies in addition.

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance in accordance with Regulation (EC) No 1907/2006. The relevant exposure scenarios are available on request.

16 OTHER INFORMATION

16.1 Revision information

This version replaces the previous edition in full. The revision restructures the document into the 16-section GHS format, adds the classification and labelling elements required by Regulation (EC) No 1272/2008, converts the composition to a tabular mass-fraction basis, completes Section 9 with the physical and chemical properties, and removes internal formatting remarks from the published text.

16.2 Full text of hazard statements referred to in Sections 2 and 3

H302	Harmful if swallowed.

16.3 Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service. CLP: Classification, Labelling and Packaging (Regulation (EC) No 1272/2008). EC50: half maximal effective concentration. GHS: Globally Harmonised System. IMDG: International Maritime Dangerous Goods Code. LC50: lethal concentration, 50 %. LD50: lethal dose, 50 %. OEL: occupational exposure limit. PBT: persistent, bioaccumulative and toxic. PNEC: predicted no-effect concentration. STOT: specific target organ toxicity. vPvB: very persistent and very bioaccumulative.

16.4 Training advice

Users of this product must be trained in safe handling practice, in the correct use of personal protective equipment and in the first-aid measures described in Section 4. Label instructions and national training requirements apply.

16.5 Disclaimer

The information in this safety data sheet is based on the present state of knowledge and current legislation at the date of revision. It describes the product with regard to safety requirements and does not constitute a guarantee of any specific property. It remains the responsibility of the user to ensure that the product is used safely and in accordance with the label and applicable legislation. This safety data sheet is supplied for occupational health and safety purposes only.

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