Almandine Corporation SA

Gotthardstrasse 3, 6300 Zug, Switzerland
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Email: almch@almandine.com

SAFETY DATA SHEET

AMINOBAR

Issue date: 27.01.2021

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

Product identifiers

Product name:	Aminobar
Chemical name:	2,4-D Dimethylamine salt
CAS No.:	2008-39-1

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

Identified uses:	herbicide for agricultural use

Details of the supplier of the safety data sheet

Supplier:
Almandine Corporation SA
Gotthardstrasse 3
6300 Zug
Switzerland
Tel: +44 20 8995 8391 (UK office)
Fax: +44 20 8995 7639
Email: almuk@almandine.com

Emergency telephone number

Tel: +44 20 8995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri only, UK)

SECTION 2: HAZARDS IDENTIFICATION

Pictograms(s):

Signal word: Danger

Hazard statement(s):

H302: Harmful if swallowed
H318: Causes serious eye damage
H317: May cause an allergic skin reaction
H411: Toxic to aquatic life with long lasting effects

Precautionary statement(s):

P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312: IF SWALLOWED: Call a poison centre/doctor if you feel unwell.
P330: Rinse mouth.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

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P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
P363: Wash contaminated clothing before reuse.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/kg)	Signal word	R-phrases
2,4-DMA (as 2,4-D acid)	2008-39-1	800	Danger	H302, H317, H318, H411
2,4-dichlorophenol	120-83-2	<5	Danger	H302, H311, H314, H411

See Sections 2 and 16 for H-phrase explanations

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre and follow the advice given. Show this Safety Data Sheet to the doctor.

Inhalation: If inhaled, remove to fresh air, keep warm and at rest. Administer oxygen or artificial respiration if needed. Seek medical attention immediately.

Skin contact: Avoid contact with skin. Will irritate skin. Carefully remove contaminated clothing and footwear. Wash affected areas with large amounts of water for at least 10 minutes. Seek medical advice if concerned.

Eye contact: Rinse eyes with plenty of water keeping the eyelids open for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

Symptoms: From experiments with animals:, sweating, headache, weakness, diarrhoea, anorexia, nausea, salivation, stomach pains, blurred vision, muscle twitching, convulsions, loss of reflex, heart and circulatory collapse, coma.

Treatment: No specific antidote, symptomatic treatment. As elimination occurs via the kidneys dialysis is appropriate. Control water and electrolytes balance.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: Water fog, fine water spray, foam, dry chemical, carbon dioxide. Do not use water jet.

Hazards from combustion products: Combustion products are toxic and/or irritant. In the event of fire (HCl, Cl2, NOx, CO) may be formed.

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Advice for fire fighters: Fire-fighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. Use water spray to cool containers.

Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear PPE as recommended in section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away.

Environmental precautions: Prevent product from entering drains or water courses. Warn the local water authority if water-courses become contaminated.

Clean-up methods: Pick up and arrange disposal without creating aerosol. Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment by washing areas with water. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 7: HANDLING AND STORAGE

Handling: Keep out of reach of children. Irritating to eyes. Avoid breathing vapour or spray. For product in eyes, wash immediately with water. For product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Storage: Store in the closed original container, in a cool, dry, well-ventilated area, away from direct sunlight and sources of ignition.

Incompatibility: Bases.

Flammability: Not flammable under normal conditions of use. The product does not sustain combustion.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure limits: No data on exposure limits

Engineering Controls: Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.

Personal Protective Equipment: Wear face shield or goggles.
Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots.

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Wear elbow length nitrile or neoprene rubber gloves.
If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours.
After each day's use, wash gloves, goggles or face shield, respirator if worn, and contaminated clothing.

Do not re-enter treated areas without protective clothing until spray residue has dried.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance:	Solid pale brown powder
b)	Odour:	acetone like
c)	Odour threshold:	none set
d)	pH:	6.5 – 7.5
e)	Melting point/freezing point:	Decomposes before melting
f)	Boiling point/boiling range:	Decomposes before boiling
g)	Flashpoint:	Does not flash
h)	Evaporation rate:	-
i)	Flammability (solid/gas):	Not flammable
j)	Upper/lower flammability or explosive limits:	not relevant
k)	Vapour pressure:	not determined
l)	Vapour density:	not determined
m)	Relative density:	775 kg/m^3
n)	Solubility:	3000 g/L (water 20°C)
o)	Partition coefficient:	Log P_{ow} -0.83 (technical material)
p)	Auto-ignition temperature:	not relevant
q)	Decomposition temperature:	200°C
r)	Viscosity:	not relevant
s)	Explosive properties:	Not explosive
t)	Oxidising properties:	Not an oxidiser

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions of use. Will not polymerise.

Chemical stability The product is stable if stored and handled as prescribed /indicated.

Possibility of hazardous reactions
No hazardous reactions when stored and handled according to instructions.

Conditions to avoid None known.

Incompatible materials Strong bases.

Hazardous decomposition Products: Does not decompose at ambient temperature. Combustion or thermal decomposition will evolve toxic and irritant vapours.

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SECTION 11: TOXICOLOGICAL INFORMATION

Oral toxicity:	LD_{50} rat: 625 mg/kg (GHS Cat. 4)
Dermal toxicity:	LD_{50} rat: >2000- 5000 mg/kg (GHS Cat. 5)
Inhalation toxicity:	LC_{50} rat 4 h >2.06 mg/L
Skin irritation:	Not an irritant
Eye irritation:	Causes serious eye damage
Skin sensitisation:	May cause an allergic skin reaction
Long-term exposure:	Repeated or prolonged overexposure to phenoxy herbicides may cause liver, kidney, gastrointestinal or muscular system effects.

Not classified as a carcinogen, mutagen, teratogen or reproductive toxin

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (technical material)

Fish toxicity:	LC_{50} 96 h rainbow trout	100 mg/L
***Daphnia* toxicity:**	EC_{50} 48 h *Daphnia magna*	>1.128 mg/L
Algal toxicity:	LD_{50} 72 hr *Scenedesmus subspicatus*	51.2 mg/L
Aquatic plant toxicity:	EC_{50} *Lemna Gibba* NOEC *Lemna Gibba*	0.58 mg/L 0.27 mg/L
Bird toxicity:	LD_{50} bobwhite quail	500 mg/kg

Biodegradability:	Readily biodegradable
Stability in soil:	DT_{50} 2,4-D: 8-25d
Stability in water:	DT_{50} 2,4-D: 13d
Bioaccumulation:	does not bioaccumulate

SECTION 13: DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Empty containers should be triple-washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

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SECTION 14: TRANSPORTATION INFORMATION

UN number:	3077		
UN Proper Shipping Name:	Environmentally hazardous substance, solid, N.O.S. (contains 2,4-DMA)		
Transport hazard class:	ADR/RID: 9	IMDG: 9	IATA: 9
Packaging group:	ADR/RID: III	IMDG: III	IATA: III
Environmental hazard:	ADR/RID: Yes	IMDG: Marine pollutant: Yes	IATA: Yes

SECTION 15: REGULATORY INFORMATION

No additional regulatory information required for this product

SECTION 16: OTHER INFORMATION

Hazard statement(s):	H302:	Harmful if swallowed
	H317:	May cause an allergic skin reaction
	H318:	Causes serious eye damage
	H412:	Harmful to aquatic life with long lasting effects

Time weighted average (TWA) is the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's handling of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.