



2,4D Amine

Safety Data Sheet

according to the GHS Classification and labelling of chemicals – SANS 10234 and the Regulations for Hazardous agents 2021.
Issue date: 30/04/2025 Date of revision: 30/04/2028 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Name : 2,4D Amine
Trade name : 2,4D Amine
Product code : UPL_L4744
Type of product : Plant protection products
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Herbicide
Industrial/Professional use spec : For agricultural, industrial and professional use only
Use of the substance/mixture : A selective hormone type herbicide for the control of broadleaf weeds in crops as indicated.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UPL South Africa (Pty) Ltd.
Sunbury Office Park (off Douglas Saunders Drive) La Lucia Ridge, 7
P.O. Box 1726, Mount Edgecombe, 4300
4019 Durban – South Africa
South Africa
T +27 31 514 5600
www.upl-ltd.com/za

1.4. Emergency telephone number

Emergency number : Griffon Poison Information Centre: 082 4468946,
Poisons Information Helpline: 0861 555 777,
In case of Spillage: Spill Tech: 086 100 0366 / 083 253 6618

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to UN GHS Purple Book (Rev. 9, 2021)

Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Specific target organ toxicity- Single exposure, Category 3	H335
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412
Full text of H-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to UN GHS Classification (Purple Book, Rev.9, 2021)

Hazard pictograms :



Signal word :

Contains :

Hazard statements :

Precautionary statements :

- Danger
- 2,4-D dimethylamine salt; Isopropyl alcohol
- H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.
- P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children
P103 - Read carefully and follow all instructions.
P261 - Avoid breathing fume, mist, spray, vapours.
P264+P265 - Wash hands, forearms and face thoroughly after handling. Do not touch eyes.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, eye protection, face protection, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P317 - Get medical help.
P319 - Get medical help if you feel unwell.
P321 - Specific treatment (see first aid treatment on this label).
P333 + P317 - If skin irritation or rash occurs: Get medical help.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to UN GHS Purple Book, Rev.9, 2021.
2,4-D dimethylamine salt	Cas no. 2008-39-1 EC-no.: 217-915-8	40 - 60	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Isopropyl alcohol	Cas no.: 67-63-0 EC-no.: 200-661-7	0.5 - 1	Eye irrit. 2, H319 STOT SE 3, H336

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Full text of H -statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause an allergic skin reaction.
Symptoms/effects after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

USA - ACGIH - Occupational Exposure Limits	
Local name	2-Propanol
ACGIH OEL TWA [ppm]	200 ppm
ACGIH OEL STEL [ppm]	400 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2021
USA - ACGIH - Biological Exposure Indices	
Local name	2-PROPANOL
BEI	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2021

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Hand protection:

Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: clear. Brownish.
Odour	: Mild basic odour.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: > 190 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 1.1 g/ml
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable

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Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in UN GHS Purple Book (Rev. 9, 2021)

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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LD50 oral calculated	15305.45 mg/kg
LD50 dermal calculated	15305.45 mg/kg
LD50 inhalation calculated	15.2 mg/l

2,4D dimethylamine salt (94-75-7)

LD50 oral rat	639 - 764 mg/kg
LD50 dermal rat	> 2400 mg/kg
LD50 inhalation rat	>1.7 mg/l

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Isopropyl alcohol (67-63-0)	
LD50 oral rat	5840 mg/kg
LD50 dermal rat	12800mg/kg
LD50 inhalation rat	37,5 mg/l

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye damage. pH: 8 – 10
Additional information	: Moderate Eye irritation
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: No carcinogenic effect was noted Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: May cause respiratory irritation
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Not rapidly degradable	

2,4D Amine	
LC50 Fish calculated	86.21 mg/l
LC50 Daphnia calculated	0.08 mg/l
EC50 Algae calculated	33.71 mg/l

2,4D dimethylamine salt (94-75-7)	
LC50 Fish	100 mg/l fathead minnows
EC50 Algae	>78 mg/l Pseudokirchneriella subcapitata

Isopropyl alcohol (67-63-0)	
LC50 Fish	9.64 mg/l Pimephales promelas

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Isopropyl alcohol (67-63-0)

LC50 Daphnia	13.299 Daphnia magna
EC50 Algae	>1.0 mg/l <i>Desmodesmus subspicatus</i>

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information




In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.
Transport document description		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III
14.3. Transport hazard class(es)		
9	9	9

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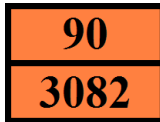
ADR	IMDG	IATA
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available		

14.6. Special precautions for user

Overland transport

Hazard identification number (Kemler No.) : 90

Orange plates :



14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

Regulatory Information:

Relevant regulatory information regarding authorization, Safety Data Sheets, Occupational Exposure Limits, Hazardous Substances, Dangerous Goods Transport and Waste South Africa: Occupational Health and Safety Act 1993. Regulations for Hazardous Chemical Agents - 2021. Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). Hazardous Substances Act, 1973 (Act No.15 of 1973). Regulations for Hazardous Chemical Agents – 2021. SANS11014:2010. Safety Data Sheet for Chemical Products – Content and Order of Sections. SANS10206: 2020. The Handling, Storage and Disposal of Pesticides. National Road Traffic Act, 1996 (Act No. 93 of 1996). SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes. National Environmental Management: waste Act 59 of 2008.

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

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Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : ECHA, Pesticide manual & Supplier SDS

Other information : None.

Full text of H- statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye irrit. 2	Eye irritation, Category 2
Skin sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Classification and procedure used to derive the classification for the mixture according to the UN GHS Purple Book (Rev.9, 2021):

Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet (SDS), UN GHS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.