

SAFETY DATA SHEET

Dipicrylamine

SECTION 1: Identification

1.1. Product identifier

Trade name

Dipicrylamine

Other names / Synonyms

60037: Dipicrylamine, 25 mg

Product no.

60037

Other means of identification

CAS No.: 131-73-7

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

Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.
Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Biotium, Inc.

46117 Landing Parkway

CA 94538 Fremont

USA

T: +1 510-265-1027

Fax: +1 510-265-1352

<http://www.biotium.com>

E-mail

techsupport@biotium.com

SDS date

6/28/2024

SDS Version

1.0

Date of previous version

6/27/2024 (1.0)

1.4. Emergency telephone number

In an emergency call 911

Alberta / Northwestern Territories (PADIS): 1-800-332-1414

British Columbia (DPIC): 1-800-567-8911

Manitoba: 1-855-7POISON (1-855-776-4766)

New Brunswick: 911

Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161

Ontario (OPC): 1-800-268-9017

Québec (CAPQ): 1-800-463-5060

Saskatchewan (PADIS): 1-866-454-1212

Yukon Territory: (867) 393-8700

Transport emergencies: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone (24 hours)

See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

Classified according to WHMIS 2022.

2.1. Classification of the substance or mixture

Expl. 1.1; H201, Explosive; mass explosion hazard.

Acute Tox. 2; H300, Fatal if swallowed.

Acute Tox. 1; H310, Fatal in contact with skin.

Acute Tox. 2; H330, Fatal if inhaled.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

Classified as Aquatic Chronic 2: H411 according to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Explosive; mass explosion hazard. (H201)

Fatal if swallowed, in contact with skin or if inhaled. (H300+H310+H330)

May cause damage to organs through prolonged or repeated exposure. (H373)

Precautionary statement(s)

General

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Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Keep wetted with water/ethanol/petroleum ether. (P230)

Keep only in original packaging. (P234)

Do not subject to grinding/shock/friction. (P250)

Do not breathe dust. (P260)

Do not get in eyes, on skin, or on clothing. (P262)

Wash hands and exposed skin thoroughly after handling. (P264)

Use only outdoors or in a well-ventilated area. (P271)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

[In case of inadequate ventilation] wear respiratory protection. (P284)

Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)

Immediately call a POISON CENTER/doctor. (P310)

Get medical advice/attention if you feel unwell. (P314)

Specific treatment is urgent (see instructions on this label). (P320)

Rinse mouth. (P330)

Take off immediately all contaminated clothing and wash it before reuse. (P361+P364)

In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives. (P370+P372+P380+P373)

Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Store locked up. (P405)

Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

bis(2,4,6-trinitrophenyl)aminehexyl

Additional labelling

Not applicable.

2.3. Other hazards

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Product/substance	Identifiers	% w/w	Classification	Note
bis(2,4,6-trinitrophenyl)aminehexyl	CAS No.: 131-73-7	>90%	Expl. 1.1, H201 Acute Tox. 2, H300 Acute Tox. 1, H310 Acute Tox. 2, H330 STOT RE 2, H373	

3.2. Mixtures

Not applicable. This product is a substance.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: First-aid measures

4.1. Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

None known.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

DO NOT attempt firefighting, risk of explosion.

5.2. Special hazards arising from the substance or mixture

Risk of explosion by shock, friction, fire or other sources of ignition.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Restrict the number of action force members in the hazard area. Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Measures in case of adjacent fire (Fire has not yet reached product): Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.

Measures in case of product fire (Fire has just reached the product or is about to reach it): No fire-fighting attempts, risk of explosion. Immediately evacuate danger zone and seek safe cover.

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact a poison centre in order to obtain further advice. See section 1 "Emergency telephone number".

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid contact with the substance. Wear suitable protective equipment before handling. Follow emergency procedures. Evacuate the danger area and notify your supervisor. Ask for assistance from a competent person.

For emergency responders: Close off the hazard area. Ask for assistance from a competent person.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Use only non-sparking tools. Clean up manually and place in appropriate containers for disposal.

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Only to be handled by authorised persons. The explosives must be under supervision and kept away from unauthorised persons. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock, friction. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed outside of the workplace. Wash hands before breaks and after work.

Use non-sparking tools.

Use explosion-proof [electrical/lighting/ventilating] equipment.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. ▼ Conditions for safe storage, including any incompatibilities

Store in original packaging if possible. Explosives and explosive articles should be stored in accordance with the licence issued by the relevant national authority. Store under cool conditions. Store under dry conditions. Stable under normal storage conditions. Maximum storage quantity should be agreed with national authorities. Store in a well-ventilated place. Store in a closed container.

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).

Recommended storage material

No specific requirements

▼ Storage temperature

Keep container tightly closed in a dry and well-ventilated place.

Protect from light.

Refrigerator 2°C to 8°C.

Incompatible materials

Reducing agent, Acids, Alkalis, Combustible products, Metal powders, Chromates, Zinc, Copper, Copper alloys,

Chlorates, Nitrites.

No specific requirements

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in any provincial list of substances with an occupational exposure limit.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above).

Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



Skin protection

Recommended	Type/Category	Standards
n/a	n/a	n/a

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.			



Eye protection

Type	Standards
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Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	EN166
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid

Colour

No data available

Odour

No data available

Odour threshold (ppm)

No data available

pH

No data available

Density (g/cm³)

No data available

Relative density

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

Phase changes

Melting point (°C)

No data available

Softening point/range (°F)

Does not apply to solids.

Boiling point (°C)

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

No data available

Flammability (°C)

No data available

Auto-ignition temperature (°C)

No data available

Explosion limits (% v/v)

No data available

Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is an explosive.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

Product is an explosive.

10.4. Conditions to avoid

Heating may cause an explosion.

Mechanical influences (e.g. shock, pressure, impact, friction). Fire, sparks or other ignition sources.

Heat, flames and sparks.

10.5. Incompatible materials

Reducing agent, Acids, Alkalis, Combustible products, Metal powders, Chromates, Zinc, Copper, Copper alloys, Chlorates, Nitrites.

No specific requirements

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Fatal if swallowed.

Fatal in contact with skin.

Fatal if inhaled.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods




None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
TDG	UN0079	HEXANITRODIPHENYLAMINE (DIPICRYLAMINE; HEXYL)	Transport hazard class: 1 Label: 1 Classification code: 1.1D 	-	No	Limited quantities: 0 Tunnel restriction code: (B1000C) See below for additional information.
IMDG	UN0079	HEXANITRODIPHENYLAMINE (DIPICRYLAMINE; HEXYL)	Transport hazard class: 1 Label: 1 Classification code: 1.1D 	-	No	Limited quantities: 0 EmS: F-B S-Y See below for additional information.
IATA	UN0079	HEXANITRODIPHENYLAMINE (DIPICRYLAMINE; HEXYL)	Transport hazard class: 1 Label: 1 Classification code: 1.1D 	-	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

TDG / See Schedule 1 for any information on special provisions, requirements, or warnings in connection with transport. See part 3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Product is an explosive.

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

Not applicable.

SECTION 15: Regulatory information

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

15.2. Canadian lists

DSL / NDSL

bis(2,4,6-trinitrophenyl)aminehexyl is listed

15.4. Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education

No specific requirements.

Additional information

Not applicable.

15.7. Chemical safety assessment

No

Sources

Explosives Regulations, 2013 (SOR/2013-211)

Hazardous Products Regulations (SOR/2022-272)

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H201, Explosive; mass explosion hazard.

H300, Fatal if swallowed.

H310, Fatal in contact with skin.

H330, Fatal if inhaled.

H373, May cause damage to organs through prolonged or repeated exposure.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PHNOC = Physical Hazards Not Otherwise Classified
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL = A specific concentration limit.
SOR = Statutory Orders and Regulations
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TDG = Transportation of Dangerous Goods
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative
WHIMS = Workplace Hazardous Materials Information System

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by WHMIS 2022

The classification of the mixture in regard to physical hazards has been based on experimental data.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

▼ The safety data sheet is validated by

Julianne Davis

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: CA-en