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

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case
See also section 4 “First aid measures”.

SECTION 2: Hazard(s) identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

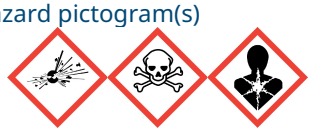
2.1. Classification of the substance or mixture

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)

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.

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

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

the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

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 with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

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

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
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

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/cm^3)
No data available

Relative density
No data available

Kinematic viscosity
No data available

Particle characteristics
No data available

Phase changes

Melting point (°F)
No data available

Softening point/range (°F)
Does not apply to solids.

Boiling point (°F)
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Decomposition temperature (°F)
No data available

Data on fire and explosion hazards

Flash point (°F)
No data available

Flammability (°F)
No data available

Auto-ignition temperature (°F)
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

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)
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:
DOT	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
DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, 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. U.S. Federal regulations

TSCA (the non-confidential portion)

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

Clean Air Act

None of the components are listed

EPCRA Section 302

None of the components are listed

EPCRA Section 304

None of the components are listed

EPCRA section 313

None of the components are listed

CERCLA

None of the components are listed

State regulations

California / Prop. 65

None of the components are listed

Massachusetts / Right To Know Act

None of the components are listed

New Jersey / Right To Know Act

bis(2,4,6-trinitrophenyl)aminehexyl / Substance number: 0999
bis(2,4,6-trinitrophenyl)aminehexyl is on the Special Health Hazard Substance List
—

New York / Right To Know Act

None of the components are listed

Pennsylvania / Right To Know Act

None of the components are listed

15.4. Restrictions for application

Restricted to professional users.
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.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

ACGIH = American Conference of Governmental Industrial Hygienists
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CERCLA = Comprehensive Environmental Response Compensation and Liability Act
DOT = Department of Transportation
EINECS = European Inventory of Existing Commercial chemical Substances
EPCRA = Emergency Planning and Community Right-To-Know Act
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HCIS = Hazardous Chemical Information System
HNOC = 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)
NFPA = National Fire Protection Association
NIOSH = National Institute for Occupational Safety and Health
OECD = Organisation for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
PBT = Persistent, Bioaccumulative and Toxic
RCRA = Resource Conservation and Recovery Act
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SARA = Superfund Amendments and Reauthorization Act
SCL = A specific concentration limit.
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TSCA = The Toxic Substances Control Act
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

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).
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: US-en