


SAFETY DATA SHEET

2,2-DIBROMO-3-NITRILOPROPIONAMIDE

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

1.1 Product identifier:	
CAS Number:	10222-01-2
EC number:	233-539-7
1.2 SYNONYMS:	<ul style="list-style-type: none"> • 2,2-Dibromo-3-cyano-propionamide • 2,2-Dibromo-3-aminopropionitrile • N-(2,2-Dibromo-3-cyano-propyl)amide

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	<p>Labelling according to Regulation (EC) No 1272/2008</p> <p>Acute toxicity, Oral (Category 3)</p> <p>Acute toxicity, Inhalation (Category 2)</p> <p>Skin irritation (Category 2)</p> <p>Serious eye damage (Category 1)</p> <p>Skin sensitization (Category 1)</p> <p>Specific target organ toxicity - repeated exposure, respiratory tract (Category 1)</p> <p>Short-term (acute) aquatic hazard (Category 1)</p> <p>Long-term (chronic) aquatic hazard (Category 1)</p>
Hazard Pictograms:	
Signal Word:	Danger

Hazard statements:	<p>H301: Toxic if swallowed.</p> <p>H315: Causes skin irritation.</p> <p>H317: May cause an allergic skin reaction.</p> <p>H318: Causes serious eye damage.</p> <p>H330: Fatal if inhaled.</p> <p>H372: Causes damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.</p> <p>H410: Very toxic to aquatic life with long lasting effects.</p>
Precautionary Statements:	<p>P273: Avoid release to the environment.</p> <p>P280: Wear protective gloves/ eye protection/ face protection.</p> <p>P302 + P352: IF ON SKIN: Wash with plenty of water.</p> <p>P304 + P340 + P310: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P314: Get medical advice/ attention if you feel unwell.</p> <p>P405: Store locked up.</p> <p>P501: Dispose of contents/ container to an approved waste disposal plant.</p>
2.3 Other hazards:	
Inhalation:	may cause respiratory irritation, coughing, or difficulty breathing, and prolonged exposure could lead to more severe respiratory issues.
Ingestion:	may cause nausea, vomiting, abdominal pain, and potentially more severe gastrointestinal or

	systemic effects if ingested in large amounts.
Skin Contact:	may cause irritation, redness, or dermatitis, and prolonged exposure could lead to more severe skin reactions..
Eye contact:	may cause irritation, redness, tearing, or pain, and prolonged exposure could lead to more serious eye damage.
Chronic Exposure:	may lead to long-term health effects such as respiratory issues, skin sensitization, or potential damage to internal organs, depending on the level and duration of exposure.
Aggravation of pre-existing conditions:	Aggravation of pre-existing conditions such as respiratory disorders (e.g., asthma), skin conditions (e.g., eczema), or liver/kidney disease may occur with exposure to 2,2-Dibromo-3-nitrilopropionamide.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 10222-01-2 2,2-DIBROMO-3-NITRILOPROPIONAMIDE
Identification number(s):	EC number: 233-539-7

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After skin contact:	Remove contaminated clothing immediately. Wash with plenty of water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	The most important symptoms include respiratory irritation, skin and eye irritation, nausea, and abdominal pain, with potential delayed effects such as long-term respiratory issues or organ damage with chronic exposure.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide foam dry powder
5.2 Special hazards arising from the substance or mixture:	Carbon oxides, nitrogen oxides, hydrogen bromide.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

	Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area. Keep away from moisture.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	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. Wash and dry hands.
	Eye protection: Required

Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.
----------------------------	---

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Appearance: Form:	Crystalline or Powder
Colour:	White to light yellow
Odour:	Odourless or mild
pH-value:	7
Melting point/Melting range:	120°C
Boiling point/Boiling range:	Not determined
Flammability (solid, gaseous):	Flammable under certain conditions
Ignition temperature:	No data available
Decomposition temperature:	250°C
Self-igniting:	None
Flash point:	Not determined
Danger of explosion:	None
Explosion limits: Lower:	No data available
Explosion limits: Upper:	No data available
Vapour pressure:	No data available
Density at 20 °C:	No data available
Relative density:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solubility in / Miscibility with-water at 20 °C:	low Soluble
Partition coefficient:(n-octanol/water)	No data available
Viscosity:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Can undergo reactions with strong acids, bases, and oxidizers.
10.4 Conditions to avoid	High temperatures, direct sunlight, moisture.
10.5 Incompatible materials	Strong acids, strong bases, strong oxidizers.
10.6 Hazardous decomposition products	Carbon oxides, nitrogen oxides, hydrogen bromide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat): 308 mg/kg LD50 (Dermal, Rabbit): 118 mg/kg LC50 (Inhalation Rat): 0.275 mg/l (4 hr)
Skin corrosion/Irritation:	Can cause skin irritation
Serious eye damage/irritation:	Causes serious eye damage
Respiratory damage/irritation:	Can cause respiratory irritation.
Ingestion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	Can cause serious damage to respiratory tract.
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Not Biodegradable

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(fish): 3.4 mg/l (96hr) EC50(daphnia): 0.48 mg/l (48 hr) ErC50(algae): 2.3 mg/l (72 hr)
12.2 Persistence and degradability:	Not Biodegradable
12.3 Bioaccumulative potential:	low bioaccumulative
12.4 Mobility in soil:	No mobility
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Water and soap, water, isopropyl alcohol, diluted bleach solution.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	2811
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	2,2-DIBROMO-3- NITRILOPROPIONAMIDE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	6.1
14.4 Packing group · ADR, IMDG, IATA:	2
14.5 Environmental hazards:	Yes, harmful to aquatic life.
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is classified in listed substances as acute toxicity substances
---	--

Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and limitations of our knowledge, this document is only for reference. Users should make their independent judgment suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.