

# SAFETY DATA SHEET

# HEXAMINE

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

1.1 Product identifier:	
CAS Number:	100-97-0
EC number:	202-905-8
1.2 SYNONYMS:	<ul><li>Methenamine</li><li>Urotropin</li></ul>
	Formaldehyde amine

# **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:	Labelling according to Regulation (EC) No 1272/2008 Flammable solids, (Category 2) Skin sensitization, (Sub-category 1B)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	H228: Flammable solid. H317: May cause an allergic skin reaction.
Precautionary Statements:	<ul> <li>P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P240: Ground and bond container and receiving equipment.</li> <li>P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment.</li> <li>P261: Avoid breathing dust.</li> </ul>



	P280: Wear protective gloves/
	protective clothing/ eye protection/
	face protection.
	<b>P302 + P352:</b> IF ON SKIN: Wash with
	plenty of water.
	P391: Collect spillage.
	P405: Store locked up.
	<b>P501:</b> Dispose of contents/ container
	to an approved waste disposal plant.
2.3 Other hazards:	
Inhalation	can cause respiratory irritation,
	coughing, and potentially more
	severe respiratory issues with
	prolonged exposure.
Ingestion:	can lead to nausea, vomiting,
-	abdominal pain, and potentially
	more serious effects like
	gastrointestinal distress or toxicity.
Skin Contact:	can cause irritation, redness, and,
	with prolonged exposure, may lead
	to dermatitis or allergic reactions.
Eye contact:	can cause irritation, redness, and
	watering, and may lead to more
	severe damage with prolonged
	exposure.
Chronic Exposure:	may lead to respiratory issues, skin
	sensitization, or liver and kidney
	damage, particularly with prolonged
	or repeated contact.
Aggravation of pre-existing	may aggravate pre-existing
conditions:	conditions such as asthma,
	respiratory disorders, or skin
	conditions like eczema and
	dermatitis.

# **SECTION 3: Composition/information on ingredients**

3.1 Chemical characterisation:	Substances
CAS No:	Description: 100-98-0 HEXAMINE
Identification number(s):	EC number: 202-905-8



#### **SECTION 4: First aid measures**

(1 Decemination of first and	
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. If conscious, make victim drink two glasses at most immediately. 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:	Acute symptoms include respiratory irritation, nausea, and skin or eye irritation, while delayed effects may include chronic respiratory issues, skin sensitization, and potential liver or kidney damage with prolonged 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. Water spray. Alcohol-resistant foam.
5.2 Special hazards arising from the substance or mixture:	Can release formaldehyde when heated on decomposition.



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**

A A A A A A A A A A A A A A A A A A A	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.
	Do not enter this chemical into drains.
containment and cleaning up: V S c r c c c c c c c c c c c c c	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

# **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,	Store in original containers.
including any incompatibilities:	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.
	Avoid moisture.
Requirements to be met by	Keep container tightly closed in a
storerooms and receptacles:	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	A system of local and general
design of technical facilities:	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	Eyes, body and hand protection,
measures:	maintain indoor air unobstructed.
	Wear protective equipment.
	<b>Respiratory protection:</b> 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 Powder
Colour:	White
Odour:	Slight ammonia like
pH-value:	7
Melting point/Melting range:	280°C
Boiling point/Boiling range:	Not applicable
Flammability (solid, gaseous):	Flammable as a solid
Ignition temperature:	490°C
Decomposition temperature:	280°C
Self-igniting:	None
Flash point:	Not applicable
Danger of explosion:	Not determined
Explosion limits: Lower:	No data available
Explosion limits: Upper:	No data available
Vapour pressure:	Not determined
Density at 20 °C:	1.34 g/cm <sup>3</sup>
Relative density:	1.34
Vapour density:	Not applicable
Evaporation rate:	Very low



Solubility in / Miscibility with- •water at 20 °C:	Moderately Soluble
Partition coefficient:(n- octanol/water)	-1.77
Viscosity:	Not applicable

# SECTION 10: Stability and reactivity

10.1 Reactivity	Stable at room temperature
10.2 Chemical stability	This chemical is stable under
	storage conditions.
10.3 Possibility of hazardous	Can react with strong oxidizing
reactions	agents, acids to form hazardous
	reactions such as fire or risk of
	explosion
10.4 Conditions to avoid	High temperatures, direct sunlight,
	open flames, direct contact with
	strong oxidizing agents or acids.
10.5 Incompatible materials	Strong oxidizing agents, strong
	acids, heat.
10.6 Hazardous decomposition	Formaldehyde, ammonia vapors,
products	nitrogen oxides, carbon monoxide.

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat): 20.000 mg/kg LD50 (Dermal, Rabbit): 2.000
	mg/kg <b>LC50</b> (Inhalation Rat): no data available
Skin corrosion/Irritation:	Causes skin irritation
Serious eye damage/irritation:	No data available
Respiratory damage/irritation:	No data available
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:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	.1976
Biodegradability:	Moderately Biodegradable

# **SECTION 12: Ecological information**

12.1 Toxicity	LC50(fish): 49.000 mg/l (96 hr)
Aquatic toxicity:	EC50(daphnia): no data available
	ErC50(algae): no data available
12.2 Persistence and	Moderately Biodegradable
degradability:	
12.3 Bioaccumulative potential:	Low bioaccumulative
12.4 Mobility in soil:	High mobility
12.5 Other adverse effects:	No data available

# **SECTION 13: Disposal considerations**

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

# **SECTION 14: Transport information**

14.1 UN-Number · ADR, ADN,	2073
IMDG, IATA:	ONE I MILINEI
14.2 UN proper shipping name $\cdot$	HEXAMINE
ADR, ADN, IMDG, IATA:	
14.3 Transport hazard class(es) ·	4.1
ADR, ADN, IMDG, IATA :	
14.4 Packing group · ADR, IMDG,	3
IATA:	



14.5 Environmental hazards:	None
14.6 Special precautions for user:	Handle responsibly.

#### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental	Directive 2012/18/EU, under that this substance is not classified in
regulations/legislation specific	listed substance.
for the substance or mixture Directive 2012/18/EU	
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.

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