

SAFETY DATA SHEET
3-ISOBUTYL-1-METHYLYXANTHINE 99%

Section 1 - Chemical Product and Company Identification

1.1 Product identifiers

Product name: 3-ISOBUTYL-1-METHYLYXANTHINE 99%
CAS-No. 28822-58-4
EINECS-No. 249-259-3
Catalog Numbers: 9.5
Synonyms: 3,7-Dihydro-3-isobutyl-1-methyl-1h-purine-2,6-dione
IBMX
3-Isobutyl-1-methyl-2,6(1H,3H)-purinedione
3,7-Dihydro-1-methyl-3-(2-methylpropyl)-1H-purine-2,6-dione
1-Methyl-3-isobutylxanthine

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

Identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: TAU-CHEM, Ltd.
Nobelova 34, P.O. Box 29
836 05 Bratislava, Slovak Republic
Telephone +421 2 44 452 252
Fax +421 2 44 457 645

POISON CENTER: National Toxicological Information Centre
Limbová 5, 833 05 Bratislava,

1.4 Emergency telephone: +421 2 54 774 166

Section 2 - Hazards Identification


2.1 Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 4)
Eye irritation (Category 2)
Specific target organ toxicity – single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC


Harmful if swallowed.

2.2 Label elements**Labeling according to Regulation (EC) No 1272/2008 [CLP]**

Pictogram	
Signal word	Warning
Hazard statement(s)	
H302	Harmful if swallowed.
Precautionary statement(s)	
P280	Wear protective gloves/protective clothing.
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330	Rinse mouth.
P501	Dispose of contents/container to in accordance with local/regional/national/international regulation (to be specified).

Hazard symbol(s)

According to European Directive 67/548/EEC as amended

	
Hazard symbol(s)	
Xn	Harmful.
R-phrase(s)	
R22	Harmful if swallowed.
S-phrase(s)	
S36/37/39	Wear suitable protective clothing, glove and eye/face protection.
2.3 Other hazards	None.

Section 3 - Composition, Information on Ingredients

3.1 Substances

CAS#	Chemical Name:	%	EINECS#
28822-58-4	3-ISOBUTYL-1-METHYLXANTHINE	99	249-259-3

Formula	C ₁₀ H ₁₄ N ₄ O ₂
Molecular weight	222.25 g/mol

Section 4 - First Aid Measures

4.1 Description of first aid measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	If breathed in, move person into fresh air. If not breathing give artificial

respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides.

5.3 Advice for firefighters

Wear self-contained apparatus breathing apparatus for firefighting if necessary.

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 dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and dispose without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places, where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20 °C

7.3 Specific end uses

No data available

Section 8 - Exposure Controls, Personal Protection

8.1 Control parameters

Component with workplace control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice

Personal protective equipment

Eyeface protection

Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate

Skin and protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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.

Body protection

Impervious body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection

Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

- | | |
|---|---|
| a) Appearance | Form: Powder
Colour: Light yellow to white |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | 200-203 °C |
| f) Initial boiling point and boiling point range: | No data available |
| g) Flash Point: | No data available |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability | |

or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosives properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

Section 10 - Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reaction

No data available

10.4 Conditions to Avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

Other decomposition products – no data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	LD50- Intraperitoneal –mouse- 44mg/kg
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Germ cell mutagenicity	No data available

Carcinogenicity:

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available

Specific target organ toxicity – single exposure	Inhalation – May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: ZD8500000

Section 12 – Ecological Information

12.1 Toxicity	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 PBT and vPvB assessment	No data available
12.6 Other adverse effects	No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods	
Product	Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging	Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number			
ADR/RID: -	IMDG: -	IATA: -	
14.2 UN proper shipping name			
ADR/RID: NOT DANGEROUS GOODS			
IMDG: NOT DANGEROUS GOODS			
IATA: NOT DANGEROUS GOODS			
14.3 Transport hazard class			
ADR/RID: -	IMDG: -	IATA: -	
14.4 Packaging group			

ADR/RID: -	IMDG: -	IATA: -
14.5 Environmental hazards		
ADR/RID: no	IMDG: Marine pollutant: no	IATA: no
14.6 Special precautions for user		
No data available		

Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

No data available

15.6 Chemical Safety Assessment

No data available

Section 16 - Other Information

SDS version: 3

Creation Date: 09/02/2012

Further information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Disclaimer:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.