



MATERIAL SAFETY DATA SHEET



TITAN BIOTECH LIMITED

Corp. Office: A-2/3,303-305 Lusa Tower, Azadpur, Comm. Complex, Delhi, India.
Customer Care Cell: 91-11-27674615, e-mail: customercare@titanbiotechltd.com

ADENINE

Section 1: Product Identification

Product Name: ADENINE

Product Code: 561

CAS#: 73-24-5

Chemical Formula: C₅H₅N₅

Molecular Formula: 135.13

Section 2: Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 3)

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

Harmful if swallowed.

Other hazards - none

Section 3: Composition/Information on Ingredients

Name: ADENINE

Chemical Formula: C₅H₅N₅

Molecular Formula: 135.13

Section 4: First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5: Fire and Explosion Data

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Sodium oxides

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary



MATERIAL SAFETY DATA SHEET

Section 6: Accidental Release Measures

Personal precautions and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition.

Storage:

Store in cool, dry place in closed containers

Section 8: Exposure Controls/Personal Protection

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

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.

Respiratory protection

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 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

Physical state and appearance: Not available.

Odor: Not available.

Taste: Not available.

pH: Not available.

Boiling Point: Not available.

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available



MATERIAL SAFETY DATA SHEET

Solubility: Not available.

Section 10: Stability and Reactivity Data

Stability: Stable under recommended storage conditions.

Instability Temperature: Not available.

Conditions of Instability: Excess heat.

Incompatibility with various substances: Strong oxidizing agents

Special Remarks on Reactivity: Not available.

Section 11: Toxicological Information.

Acute toxicity: LD50 Oral - rat - 227 mg/kg

Skin corrosion/irritation: Not available.

Serious eye damage/eye irritation: Not available.

Respiratory or skin sensitization: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Specific target organ toxicity - single exposure: Not available.

Specific target organ toxicity - repeated exposure: Not available.

Aspiration hazard: Not available.

Section 12: Ecological Information

Toxicity: Not available.

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

UN number:

ADR/RID: 2811

IMDG: 2811

IATA: 2811

UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S.

IMDG: TOXIC SOLID, ORGANIC, N.O.S.

IATA: Toxic solid, organic, n.o.s.

Transport hazard class(es):

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

Packaging group:

ADR/RID: III

IMDG: III

IATA: III

Environmental hazards:

ADR/RID: no

IMDG Marine pollutant: no

IATA: no



MATERIAL SAFETY DATA SHEET

Section 15: Regulatory Information

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

Not available.

Chemical Safety Assessment: Not available.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

TITAN BIOTECH LTD. PROVIDES THE INFORMATION CONTAINED HEREIN IN GOOD FAITH BUT MAKES NO REPRESENTATION AS TO ITS COMPREHENSIVENESS OR ACCURACY. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PROPERLY TRAINED PERSON USING THIS PRODUCT. INDIVIDUALS RECEIVING THE INFORMATION MUST EXERCISE THEIR INDEPENDENT JUDGMENT IN DETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE. TITAN BIOTECH LTD. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, TITAN BIOTECH LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
