1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

Chemical Name: 3-(N-Methyl-N-pentylamino)propionic acid hydrochloride
Product Code: FM25908
Synonyms: Ibanic acid hydrochloride, N-Methyl-N-pentyl-b-alanine hydrochloride.
Recommended uses: For R&D purposes
Supplier: Carbosynth Ltd, 8&9 Old Station Business Park, Compton, Berkshire, RG20 6NE, UK.
Emergency contact numbers:
  Telephone: +44 (0)1635 578 444
  Fax: +44 (0)1635 579 444
  Mobile: +44 (0)7887 998 634

2. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin.

Classification:

Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3)

Labelling and precautionary statements:

Signal word: Warning.

Hazard statement(s):
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

Precautionary statement(s):
  P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
  P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
  P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard symbol(s): Xi Irritant.
MATERIAL SAFETY DATA SHEET

3-(N-METHYL-N-PENTYLAMINO)PROPIONIC ACID HYDROCHLORIDE

R-phrase(s): R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s): S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula: C₉H₂₀ClNO₂
Molecular weight: 209.71
CAS Number: 625120-81-2
EINECS Number: -

Synonyms: Ibanic acid hydrochloride, N-Methyl-N-pentyl-b-alanine hydrochloride.

4. FIRST AID MEASURES

Eye contact: Immediately flush eye with copious amounts of water for at least 15 minutes. Get medical aid immediately.

Skin contact: In case of contact remove contaminated clothing and immediately wash affected areas with copious quantities of water and soap for at least 15 minutes. Get medical aid immediately. Wash contaminated clothing before reuse.

Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical aid.

Ingestion: Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Never give anything by mouth to an unconscious person. Wash out mouth with water provided person is conscious. Call a physician.

Notes to Physician: Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Personal precautions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing media: In case of fire use water spray, dry chemical powder, carbon dioxide, or alcohol-resistant foam.

Special hazards arising from the substance or mixture: Carbon oxides, nitrogen oxides, hydrogen chloride.
6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.
Personal precautions: Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with skin and eyes. Prevent the formation of dusts and mists. Adequate ventilation must be provided to ensure dusts or mists are not inhaled.
Environmental precautions: Do not let product enter the drains. Prevent further spillage or discharge into drains, if safe to do so.
Spills/Leaks: Contain the spill and then collect using non-combustible absorbent material (such as clay, diatomaceous earth, vermiculite or other appropriate material) and place the material in appropriate container for disposal and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

7. HANDLING AND STORAGE

Handling: Wear appropriate protective clothing - see Section 8. Wash hands and face thoroughly after handling. Use only under a chemical fume hood. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. No smoking, eating or drinking around this material.
Storage: Store in a cool, dry, dark, well-ventilated area. Keep container tightly closed. Do not store with strong oxidizers or other incompatible materials. Refrigerate. Keep cold. Store at 2 - 8 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protection equipment:
Eye protection: Wear appropriate protective safety glasses with side-shields conforming to EN166, chemical safety goggles or face-shield (min. 8-inch) as described by OSHA’s eye and face protection regulations. Use equipment for eye
Skin protection: Wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection: Appropriate protective clothing, overalls.

Respiratory protection: Where risk assessment indicates air-purifying respirators are required use a dust mask type P95 (US) or type P1 (EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Respirators and components must tested and approved under appropriate government standards - NIOSH (US) or CEN (EU).

Hygiene measures: Use good working practices. Wash hands and face thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white solid.

Odour: Data not available/does not apply.

Odour threshold: Data not available/does not apply.

pH: Data not available/does not apply.

Melting point: Data not available/does not apply.

Boiling point: Data not available/does not apply.

Flash point: Data not available/does not apply.

Evaporation rate: Data not available/does not apply.

Flammability: Data not available/does not apply.

Flammability or explosive limits: Data not available/does not apply.

Vapor pressure: Data not available/does not apply.

Vapor density: Data not available/does not apply.

Relative density: Data not available/does not apply.

Solubility: Soluble (DMSO, methanol).

Partition coefficient: n-octanol/water Data not available/does not apply.

Auto-ignition temperature: Data not available/does not apply.

Decomposition temperature: Data not available/does not apply.

Viscosity: Data not available/does not apply.

10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Data not available.

Incompatibilities with other materials: Strong oxidizing agents.

Hazardous decomposition products: Data not available.

Hazardous polymerization: Data not available.
11. TOXICOLOGICAL INFORMATION

RTCS #: Data not available.
Acute toxicity: Data not available.
Skin corrosion/irritation: Moderate skin irritant.
Serious eye damage/eye irritation: Moderate eye irritant.
Respiratory or skin sensitization: Data not available.
Germ cell mutagenicity: Data not available.
Carcinogenicity: Data not available.
Reproductive toxicity: Data not available.

Specific target organ toxicity - single exposure: Inhalation - May cause respiratory irritation.
Specific target organ toxicity - repeated exposure: Data not available.

Aspiration hazard: Data not available.

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

Target organs: Data not available.

Potential health effects:
Eye: Causes serious eye irritation.
Skin: May be harmful by skin absorption. Causes skin irritation.
Ingestion: May be harmful if swallowed.
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Chronic: No information found.

12. ECOLOGICAL INFORMATION

Data not available.

13. DISPOSAL CONSIDERATIONS
Observe all federal, state and local environmental regulations. Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Contact a licensed professional waste disposal service to dispose of this material. Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

14. TRANSPORT INFORMATION

**ADR/RID**
Not classified as hazardous for transport.

**IMDG**
Not classified as hazardous for transport.

**IATA**
Not classified as hazardous for transport.

15. REGULATORY INFORMATION

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

16. ADDITIONAL INFORMATION

Further information on PPE:
European Standard & performance category markings:
- EN143 - Particulates filter.
- EN166 - Standard applicable to all types of personal eye protectors.
- EN374 - Protects hands against chemicals and/or microorganisms.

Gas & vapour protection:
- A Organic vapours
- B Inorganic vapours
- E Acid gases
- K Ammonia and its derivatives

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.