

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: N-ACETYL-L-TYROSINE ETHYL ESTER CAS#: 36546-50-6 C.I. No.: Not available. Synonym: Not available. Chemical Name: Not available. Chemical Formula: C13H17NO4· H2O Molecular Weight: 269,29

Composition and Information on Ingredients

Name	S.K.U	% by Weight
N-ACETYL-L-TYROSINE	GCS-1563	100
ETHYL ESTER		

Hazards Identification

Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

Label elements: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Other hazards: None.

First Aid Measures

First aid measures:

Description of 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. Consult a physician.

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.



Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

Fire and Explosion Data

Extinguishing media:

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 (NOx)

Advice for firefighters :Wear self-contained breathing apparatus for firefighting if necessary.

Further information: No data available

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see section 13.

Handling and Storage

Precautions for safe handling: Avoid formation of dust and aerosols.Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities: Store in cool place.Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510):13 Non Combustible Solids.

Specific end use(s): Apart from the uses mentioned in section 1.2 no other specific uses are stipulate.

Exposure Controls/Personal Protection



Exposure controls: General industrial hygiene practice.

Personal protective equipment:

Eye/face protection: Face shield and safety glasses 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

Physical and Chemical Properties

Physical state and appearance	: Powder.
Odour	: Not available.
Taste	: Not available.
Color	: White.
pH (1% soln/water)	: Not available.
Melting Point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits :	
Not available.	
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: Not available.
Water solubility	: Not available.



Stability and Reactivity Data

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: No data available

Incompatible materials: Strong Oxidizing agents.

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions.- Carbon oxides, Nitrogen oxides (NOx).

Toxicological Information

Information on toxicological effects: Acute toxicity: No data available

Skin corrosion/irritation: No data available .

Serious eye damage/eye irritation: No data available.

Respiratory or skin sensitisation: No data available.

Germ cell mutagenicity: No data available

Carcinogenicity: IARC: No component of this product present 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: No data available

Specific target organ toxicity -repeated exposure: No data available

Aspiration hazard: No data available

Ecological Information

Toxicity: No data available

Persistence and degradability: No data available



Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

Disposal Considerations

Waste treatment methods:

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Dispose of as unused product.

Transformation Information

Land transport (ADR-RID) General information: Not regulated.

Sea transport (IMDG) [English only] General information: Not regulated.

Air transport (ICAO-IATA) [English only] General information: Not regulated.

Other Regulatory Information

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

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

Chemical safety assessment: For this product a chemical safety assessment was not carried out

Additional Information

References: Not available.

Other Special Considerations: Not available.



Disclaimer:

The information contained herein in good faith but makes no representations 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.

C: CiaNt <u>Chem</u> 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, C: CiaNt Chem responsible for damages resulting from use of or reliance upon this information.