



Material Safety Data Sheet: ATTO 590 NHS-ester

1. Substance and Company Identification

MSDS Name: ATTO 590 NHS-ester
Catalogue No.: AD 590-3
Unit Size: 1 mg (Order Code: AD 590-31)
5 mg (Order Code: AD 590-35)
Product Name: ATTO 590 NHS-ester
Company Identification: ATTO-TEC GmbH
Am Eichenhang 50
D-57076 Siegen
Germany
For Information:
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2. Composition/Information on Ingredients

ATTO 590 NHS-ester perchlorate salt
Molecular Formula: $C_{41}H_{42}ClN_3O_{11}$
Molecular Weight: 788.3 g/mol

3. Hazard Information

Physical Hazards: Not determined
Carcinogen Status: Not determined
Skin Contact: Not determined
Eye Contact: Not determined
Recommendation: Not determined

4. First Aid Measures

Potentially harmful. Avoid prolonged or repeated exposure. Wash thoroughly after handling. If eye or skin contact has occurred, wash affected area with water for 15 minutes and seek medical advice. If inhaled, move individual to fresh air and seek medical advice. If swallowed, seek medical advice.

5. Fire Fighting Measures

Use dry chemical powder or appropriate foam extinguisher.

6. Accidental Release Measures

Use appropriate protective equipment and methods to clean up spilled substances promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

7. Handling and Storage

Store at $\leq -20^{\circ}\text{C}$.
 Desiccation recommended.
 Protect from long-term exposure to light and moisture.

8. Exposure Controls / Personal Protection

Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.

9. Physical and Chemical Properties

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|----------------------|----------------|
| Form: | Solid |
| Odor: | Not determined |
| Solubility in Water: | Moderate |
| Specific Gravity: | Not determined |
| Boiling Point: | Not determined |
| Melting Point: | Not determined |
| Flash Point: | Not determined |

10. Stability and Reactivity

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|--------------------------------------|--|
| Thermal Decomposition: | No decomposition if used according to specification. |
| Dangerous Reactions: | No dangerous reactions identified. |
| Dangerous Products of Decomposition: | No dangerous decomposition products identified. |

11. Toxicological Information

| | |
|--------------------|---|
| RETCS Number: | None known |
| Health Hazards: | We are not aware of any reported health hazards for this product. We recommend treating all chemicals with caution. |
| Toxicity: | We are not aware of any toxicity data for this product. |
| Potential Hazards: | The properties of this product have not been completely investigated, however we recommend treating this chemical as potentially hazardous. |
| Carcinogenicity: | Not known |

12. Ecological Information

13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

14. Transport Information

| | |
|------------------------|----------------|
| Shipping Name: | Not determined |
| Hazard Class: | Not determined |
| Identification Number: | Not determined |
| Packing Group: | Not classified |

17. Regulations

16. Additional Information

The information provided herein is based on sources believed to be reliable as of 2007-03-22 and pertains only to the material designated. ATTO-TEC GmbH gives no warranty to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal.

Revised: 2007-03-22