



	5/12/2003
1 Identification	
Product identifier	
Product name: 4-Amino-2,2-difluoro-1,3-benzodioxole	
Stock number: B22797 CAS Number: 106876-54-4 Relevant identified uses of the substance or mixture and uses advised against.	
Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet	
Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street	
Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com	
www.alfa.com	
Information Department: Health, Safety and Environmental Department Emergency telephone number:	
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.	
2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)	
GHS06 Skull and crossbones	
Acute Tox. 3 H301 Toxic if swallowed.	
GHS07	
Acute Tox. 4 H312 Harmful in contact with skin. Acute Tox. 4 H332 Harmful if inhaled.	
Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. Hazards not otherwise classified No information known.	
Label elements	
GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms	
GHS06	
Signal word Danger Hazard statements	
H301 Toxic if swallowed. H312+H332 Harmful in contact with skin or if inhaled. H315 Causes skin irritation.	
H319 Causes serious eye irritation. Precautionary statements	
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 IF SWALLOWED: Immédiately call a POISON CENTER/ doctor/	
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
WHMIS classification D1B - Toxic material causing immediate and serious toxic effects D2B - Toxic material causing other toxic effects	
(A) (T)	
Classification system	
HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH Itealth (acute effects) = 2	
FIRE Flammability = 1 REACTIVITY Physical Hazard = 1	
Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	
3 Composition/information on ingredients	
Chemical characterization: Substances CAS# Description:	
106876-54-4 4-Amino-2,2-difluoro-1,3-benzodioxole	USA –

- USA -(Contd. on page 2)

Product name: 4-Amino-2,2-difluoro-1,3-benzodioxole

(Contd. of page 1)

4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediately wash with water and soap and thise thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed Methemoglobinemia Indication of any immediate medical attention and special treatment needed No further relevant information available. 5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Suntable exanguishing agents Carbon dioxide, extinguishing po Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen fluoride (HEN) Hydrogen fluoride (HEF) Advice for firefutere Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. 6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to section 13. Provide a dequate ventilation. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information. 7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available. 8 Exposure controls/personal protection Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: Not required. Additional information: No data Exposure controls Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Eve protection:** Safety glasses **Body protection:** Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form:

Liquid

Product name: 4-Amino-2,2-difluoro-1,3-benzodioxole

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Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated efficient of the system toxicity - single expension for the system toxicity - single expension for the system toxicity - single expension for the system toxicity: Subacute to chronic toxicity: Absorption into the body may lead to the formation of death. Onset may be delayed 2-4 hours or longer. Additional toxicological information: To the best of the formation of the body of the system toxicity.	ritation. genic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. exposure: No effects known.
12 Ecological information Toxicity Aquatic toxicity: No further relevant information ava Persistence and degradability No further relevant in Bioaccumulative potential No further relevant infor Mobility in soil No further relevant information availe Additional ecological information: General notes: Do not allow material to be released to the environm Do not allow undiluted product or large quantities to Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant informatio	information available. rmation available. ilable.
3 Disposal considerations	ion available.

Recommendation Consult state, local or national regulations to ensure proper disposal.

(Contd. on page 4)

Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. 4 Transport information UN-Number DOT, MDG, LATA UN proper shipping name DOT Transport hazard class(es) DOT Class 6.1 Toxic substances. Label 6.1 Class 6.1 Toxic substances. Label 6.1 Class 6.1 Toxic substances. Label 6.1 OT 6.1 Class 6.1 Toxic substances. Label 6.1 DOT 6.1 Class 6.1 Toxic substances. Label 6.1 DOT 6.1 Toxic substances. 6.1 Label 6.1 DOT 6.1 Toxic substances. 6.1 Label 6.1 DOT, IMDG, IATA III DOT, IMDG, IATA III DOT, IMDG, IATA III Packing group 0.1 DOT, IMDG, IATA III	Incleaned packagings: ecommendation: Disposal must be made according to official regulations.	(Contd. of page
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Date of preparation / last revision 11/24/2015 / -

Product name: 4-Amino-2,2-difluoro-1,3-benzodioxole

(Contd. of page 4)

USA

 Abbreviations and acronyms:

 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

 ICAO: International Civil Aviation Organization

 ICAO: Trechnical Instructions by the "International Civil Aviation Organization" (ICAO)

 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

 IDG: International Air Transport Association

 MDG: International Anitime Code for Dangerous Goods

 DOT: US Department of Transportation

 IATA: LIPErational Air Transport Association

 CAS: Chemical Abstracts Service (division of the American Chemical Society)

 HMIS: Hazardous Materials Information System (CAa)

 LSO: Lethal concentration, 50 percent

 LSO: Lethal concentration, 50 percent

 LSO: Lethal concentration, 60 percent

 VPW vy Persistent and very Bioaccumulative

 ACGIH: American Cology Program (USA)

 MFP: National Toxicology Program (USA)

 MARC: International Agency for Research on Cancer

 EPA: Environmental Protection Agency (USA)