SAFETY DATA SHEET

fluorochem.

1. Identification of Substance / Mixture

Product Identifier 1.1.2 Product Name 2-Amino-4-(1H-benzo[d]imidazol-2-yl)butyric acid 1.1.2 Other Names 1.1.1 Product Code F055290 1.1.3 CAS 91332-08-0 1.1.4 MDL MFCD00447754 **1.1.5 EINECS** N/A 1.1.6 REACH Registration Number 1.2.1 Relevant Uses For research and development purposes only. 1.2.2 Uses Advised Against No uses advised against. 1.3 Supplier Details

1.3.1 Company

1.3.2 Address	Unit 14, Graphite Way Hadfield Glossop Derbys. SK13 1QH United Kingdom
1.3.3 Telephone	01457 860111
1.3.4 Email	sds@fluorochem.co.uk
1.4.1 Emergency Telephone	+44 20 3807 3798

2. Hazards Identification

2.2.1 Signal Word

2.2.2 Pictograms

2.2.3 Hazards

2.2.4 Precautions

Eye Irrit. 2A Skin Irrit. 2 STOT SE 3

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Warning



GHS07

H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280.4 Wear protective gloves/protective clothing and eye/face protection. P302+P352.2 IF ON SKIN: Wash with plenty of water and soap. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312.1 Call a POISON CENTER/doctor if you feel unwell. P321 Specific treatment. P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.2.5 Other Classification Hazards

2 Composition of I				
3. Composition of I	Ingredients			
SUBSTANCE				
3.1.1 Name	3.1.2 CAS	Einecs	3.1.3 Composition	Hazards
2-Amino-4-(1H-benzo[d] imidazol-2-yl)butyric acid	91332-08-0	N/A		H315 Skin Irrit. 2 H319 Eye Irrit. 2A H335 STOT SE 3
4. First Aid Measur	res			
4.1.1 Eye contact	ct In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing and seek medical attention.			
4.1.2 Ingestion		Where Diphoterine is not available, rinse	e mouth with copious amounts of wate	r. Seek urgent medical advice.
4.1.3 Inhalation		Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory problems seek immedia medical attention.		
4.1.4 Skin Contact	After contact with skin, wash immediately with plenty of water and soap. Remove contaminated clothing imm In case of skin reactions, consult a physician.			ove contaminated clothing immediately
4.1.5 General Advice		No additional advice.		
4.2.1 Most Important Sympt	toms and Effects	No known symptoms or effects.		
4.3.1 Immediate First Aid M	easures	No special immediate treatment required	Ł	
5. Fire Fighting Me	asures			
5.1.1 Suitable Fire Extinguis	shing Media	Carbon dioxide, alcohol resistant foam c	or dry chemical powder. Use water to e	extinguish fire.
1.2 Unsuitable Fire Extinguishing Media No known unsuitable media.				
5.2.1 Special Hazards		Thermal decomposition can lead to release of irritating gases and vapours.		
5.3.1 Advice for Fire Fighter	rs	As in any fire, wear self-contained breat	hing apparatus and full protective gea	r.
6. Accidental Relea	ase Measure	S		
6.1.1 Personal Precautions		Use personal protective equipment. Ens breathing vapours, mist or gas. Ensure a	0	
6.2.1 Environmental Precau	itions	Prevent further leakage if safe to do so. sewer systems. Discharge into the envir		Do not let product enter waterways or
6.3.1 Containment - Method	Is and Materials	Absorb the spilled material with an inert airtight container. Remove all sources of		
6.4.1 Referenced SDS Secti	ions			
7. Handling and St	orage			
Personal Precautio	ons			
7.1.1 Safe Handling		Wear appropriate personal protective ec sparks/open flame/hot surfaces. Take me exhaust ventilation, especially if dust, are For precautions see section 2.2.	easures to prevent the build-up of elec	trostatic charge. Ensure adequate
7.1.2 Protection Against Ex	plosion and Fire	Where possible, use anti static and spar	k proof equipment when handling.	
7.1.3 General Occupational	Hygiene	Handle in accordance with good industr drink or smoke when using this product.	al hygiene and safety practice. Wash	hands before and after use. Do not eat

Conditions for Safe Storage and Incompatabilities

7.2.1 Managing Storage Risks	Keep container tightly closed and upright. Store in a cool, dry and well-ventilated place.
7.2.2 Storage Controls	Keep container tightly closed in a cool area away from sunlight or heat sources.
7.2.3 Maintaining Integrity	Keep container tightly closed in a cool area away from sunlight or heat sources.
7.2.4 Other Advice	No other specific advice available.
7.3.1 Specific End Use(s)	No specific end uses are advised. The products supplied are for research purposes only.

8. Exposure Controls / Personal Protection

8.1.1 Control Parameters	
8.2.1 Engineering Measures	Use only under a chemical fume hood ensuring adequate ventilation, especially in confined areas. Ensure Hexafluorine washing solution is close to workstation. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.
8.2.2 Face Protection	Wear tightly fitting safety goggles which adhere to European standard EN 166. Ensure Hexafluorine eye wash is to hand
8.2.3 Hand Protection	Handle with impermeable gloves. Inspect gloves before use. Gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. 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.
8.2.4 Skin Protection	Wear appropriate protective clothing ensuring all skin is covered. Wear safety shoes that meet at least S1 standards. Ensure Hexafluorine washing solution is to hand. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
8.2.5 Respiratory Protection	Product should be handled in a fume cupboard with adequate extraction. No respiratory equipment is needed under normal use conditions.
8.2.6 Hygiene Protection	Ensure hair or skin particles cannot enter the chemical container.
8.2.7 Environment Exposure Controls	Avoid discharge into the environment, see section 6.2.

9. Physical and Chemical Properties

9.1.1 State	Solid
9.1.2 Appearance	Solid
9.1.3 Odour	No data available.
9.1.4 Odour Threshold	No data available.
9.1.5 pH	No data available.
9.1.6 Melting Point / Freezing Point	No data available.
9.1.7 Initial Boiling Point	No data available.
9.1.8 Boiling Range	No data available.
9.1.9 Flash Point	No data available.
9.1.10 Evaporation Rate	No data available.
9.1.11 Flammability	No data available.
9.1.12 Upper / Lower Flammability or Explosion Limits	No data available.
9.1.13 Vapour Pressure	No data available.
9.1.14 Vapour Density	No data available.
9.1.15 Relative Density	No data available.
9.1.16 Solubility	
9.1.17 Partition Coefficient	No data available.
9.1.18 Auto Ignition Temperature	No data available.
9.1.19 Decomposition Temperature	No data available.
9.1.20 Viscosity	No data available.
9.1.21 Explosive Properties	No data available.
9.1.22 Oxidising Properties	No data available.
9.2.1 Other information	No additional information available.

10. Stability and Reactivity

10.1.1 Reactivity	No known reactivity, based on information available.
10.2.1 Stability	Stable under recommended storage conditions.
10.3.1 Possibility of Hazardous Reactions	None under normal storage conditions.
10.4.1 Conditions To Avoid	Heat, sparks, open flames, sources of ignition. Exposure to moisture.
10.5.1 Incompatible Materials	Strong oxidising agents.
10.6.1 Hazardous Decomposition Products	No Data Available.

11. Toxicology Information

- 11.1.1 Acute Toxicity
- 11.1.2 Skin Corrosion / Irritation
- 11.1.3 Serious Eye Damage / Irritation
- 11.1.4 Respiratory or Skin Sensitisation

No Toxicology data available for this product. No Toxicology data available for this product. No Toxicology data available for this product. No Toxicology data available for this product.

11.1.5 Germ Cell Mutagenicity	No Toxicology data available for this product.
11.1.6 Carcinogenicity	No Toxicology data available for this product.
11.1.7 Reproductive Toxicity	No Toxicology data available for this product.
11.1.8 STOT-single Exposure	No Toxicology data available for this product.
11.1.9 STOT-repeated Exposure	No Toxicology data available for this product.
11.1.10 Aspiration Hazard	No Toxicology data available for this product.
11.2.1 Additional Toxicology Information	No Toxicology data available for this product.

12. Ecological Information

12.1.1 Toxicity	No Ecological data available for this product.
12.2.1 Persistence and Degradability	No Ecological data available for this product.
12.3.1 Bio-Accumulative Potential	No Ecological data available for this product.
12.4.1 Mobility in Soil	No Ecological data available for this product.
12.5.1 Results of PBT and vPvB assessment	No Ecological data available for this product.
12.7.1 Endocrine Disrupting Properties	No Ecological data available for this product.
12.6.1 Other Adverse Effects	No Ecological data available for this product.

13. Disposal Considerations

13.1.1 Disposal Operations 13.1.2 Disposal of Packaging Ensure product is disposed of by licensed waste carriers. Ensure INNER PACKAGING is disposed of by licensed waste carriers. Some OUTER PACKAGING MAY be recyclable if not contaminated.

14. Transport Information

IATA UN Number		ADR UN Number		IMDG UN Number	
14.1.2 IATA Proper Shipping Name	(2-Amino-4-(1H-benzo[d] imidazol-2-yl)butyric acid)	ADR Proper Shipping Name	Non Hazardous For Transport (2-Amino-4-(1H- benzo[d]imidazol-2-yl) butyric acid)	IMDG Proper Shipping Name	(2-Amino-4-(1H-benzo[d] imidazol-2-yl)butyric acid)
IATA Packing Group		ADR Packing Group		IMDG Packing Group	
14.1.4 IATA Hazard Class		ADR Hazard Class		IMDG Hazard Class	
14.1.5 IATA Sub Class		ADR Sub Class		IMDG Sub Class	

15. Regulatory Information

15.1.1 Regulatory Information	As far as Fluorochem is aware, there are no further regulations controlling this product.
15.2.1 Chemical Safety	No Chemical Safety Assessment is available for this product.
Assessment	

Regulation 2020/878.

16. Other Information

16.1.2 Information Not Covered in Other Sections	ADR: Accord Europeen sur le transport des merchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road) RID:Reglement International concernant le transport des merchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association ICAO:International Civil Aviation Organization ICAO-TI: Technical Instructions by the ICAO GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS:Chemical Abstracts Service
Revision	1
Date Modified	Aug 10, 2023 12:34:00 PM
16.1.1 Disclaimer	The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance.

with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user. This SDS adheres to Regulation (EC) No 1907/2006, and as of 13th April 2023, also conforms to EU