

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 1 of 6

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

MIBI

Further trade names

Propane, 1-isocyano-2-methoxy-2-methyl-

Synonyms:

2-Methoxyisobutyl isonitrile; 2-Methoxyisobutyl isocyanide

CAS No: 109434-22-2

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Ligand for labelling with 99mTc or 188Re

1.3. Details of the supplier of the safety data sheet

Company name:	ABX advanced biochemical compounds	
	Biomedizinische Forschungsreagenzien GmbH	
Street:	Heinrich-Gläser-Straße 10-14	
Place:	01454 Radeberg	
Telephone:	+49 3528 4041 60	Telefax: +49 3528 4041 65
e-mail:	info@abx.de	
Contact person:	Dr. Christoph Meyer	Telephone: +49 3528 4041 8732
e-mail:	meyer@abx.de	
Internet:	http://www.abx.de	

1.4. Emergency telephone number:

+49 3528 4041 60

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 3; H226
 Acute Tox. 3; H331
 Acute Tox. 3; H311
 Acute Tox. 3; H301

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

MIBI

Signal word: Danger

Pictograms:

**Hazard statements**

H226 Flammable liquid and vapour.
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 2 of 6

Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P262	Do not get in eyes, on skin, or on clothing.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P403+P235	Store in a well-ventilated place. Keep cool.
P233	Keep container tightly closed.
P273	Avoid release to the environment.

2.3. Other hazards

Warning - substance not yet tested completely.

SECTION 3: Composition/information on ingredients**3.1. Substances****Chemical characterization**

Propane, 1-isocyano-2-methoxy-2-methyl-

Sum formula: C₆H₁₁NO

Molecular weight: 113.16

Hazardous components

CAS No	Chemical name	Quantity
	EC No Index No REACH No	
	Classification (GB CLP Regulation)	
109434-22-2	MIBI	95 - < 100 %
	Flam. Liq. 3, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3; H226 H331 H311 H301	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
109434-22-2		MIBI	95 - < 100 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: ATE = 100 mg/kg	

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air. Call a physician immediately.

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing. Call a physician immediately.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

Rinse mouth thoroughly with water. Call a physician in any case! Medical examination necessary even merely on suspicion of intoxication.

SECTION 5: Firefighting measures

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 3 of 6

5.1. Extinguishing media**Suitable extinguishing media**Atomized water. Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam.**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.

Further information on storage conditions

Storage

of °C: -25

up to °C: -15

Protect against: Light.

Store under (Gas): argon. Nitrogen.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

8.2. Exposure controls**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly sealed safety glasses.

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 4 of 6

Hand protection

Single-use gloves. (NBR (Nitrile rubber).)

Skin protection

Lab apron. Chemical resistant safety shoes. Immediately remove any wetted clothing, shoes or stockings.

Respiratory protection

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: liquid
 Colour: colourless, light brown
 Odour: pungent, sharp

Changes in the physical state

Flash point: > 23 °C

Water solubility: practically insoluble

Solubility in other solvents

Methanol. Chloroform. dimethylsulphoxide (DMSO).

SECTION 10: Stability and reactivity**10.4. Conditions to avoid**

Light.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx).

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Acute toxicity, inhalant.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
109434-22-2	MIBI				
	oral	ATE 100 mg/kg			
	dermal	ATE 300 mg/kg			
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0,5 mg/l			

11.2. Information on other hazards**Other information**

Data obtained by analogy conclusion, e.g. QSAR.

SECTION 12: Ecological information**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of UK REACH.

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 5 of 6

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****List of Wastes Code - residues/unused products**

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

List of Wastes Code - used product

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: UN 2929
14.2. UN proper shipping name: Toxic liquid, flammable, organic, n.o.s. (2-Methoxyisobutyl isonitrile)
14.3. Transport hazard class(es): 6.1 (3)
14.4. Packing group: II
 Hazard label: 6.1 (3)

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2929
14.2. UN proper shipping name: Toxic liquid, flammable, organic, n.o.s. (2-Methoxyisobutyl isonitrile)
14.3. Transport hazard class(es): 6.1 (3)
14.4. Packing group: II
 Hazard label: 6.1 (3)

Marine transport (IMDG)

14.1. UN number or ID number: UN 2929
14.2. UN proper shipping name: Toxic liquid, flammable, organic, n.o.s. (2-Methoxyisobutyl isonitrile)
14.3. Transport hazard class(es): 6.1 (3)
14.4. Packing group: II
 Hazard label: 6.1 (3)

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2929
14.2. UN proper shipping name: Toxic liquid, flammable, organic, n.o.s. (2-Methoxyisobutyl isonitrile)
14.3. Transport hazard class(es): 6.1 (3)
14.4. Packing group: II
 Hazard label: 6.1 (3)

SECTION 15: Regulatory information

Safety Data Sheet

according to UK REACH Regulation

MIBI

Revision date: 20.06.2022

Product code: 7200

Page 6 of 6

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.