

## Intercure® 1

According to Regulation (EC) 1907/2006 (REACH)
As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page 1 of 7

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Trade Name: INTERCURE 1

 IUPAC name:
 (6-aminohexyl)carbamic acid

 EC name:
 (6-aminohexile)carbamic acid

EC no: 205-581-6
INDEX no: not applicable
CAS no: 143-06-6

REACH (UK) Registration no: 01-9403278005-1-0002 REACH (EU) Registration no: 01-2120755360-60-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Vulcanising agent for synthetic rubbers. Uses advised against: No use specifically advised against

1.3 Details of the supplier of the safety data sheet

Company name:

J. Allcock & Sons Ltd. Textile Street West Gorton

Manchester M12 5DL

Email: ja@allcocks.co.uk Tel +44 (0) telephone number 161 223 7181 Fax +44 (0) 161 223 7181

**1.4 Emergency telephone number:** +44 (0) 161 223 7181

## SECTION 2: HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272 / 2008 (CLP) as amended by GB\_CLP Regulation, UK SI 2019/720, and UK SI 2020/1567. Flammable solids, Hazard Category 2; H228 Eye irritation, Hazard Category 2; H319

## 2.2 Label elements

Labelling according to Regulation (EC) 1272/2008 (CLP) as amended by GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

Hazard pictograms





Signal word: Warning

<u>Hazard statements</u> H228 Flammable solid.

H319 Causes serious eye irritation.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof equipment. P280 Wear protective gloves/protectiv

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists; Get medical advice / attention.

P370 + P378 In case of fire; Use extinguishing media suitable for class A fires to extinguish.

## 2.3 Other hazards

Physical and chemical hazards

See SECTION 5.2



## Intercure® 1

According to Regulation (EC) 1907/2006 (REACH) As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page 2 of 7

Human health hazards; See SECTION 4.2

Environmental hazards;

See SECTION 12.5 and SECTION 12.6

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances

M factor:

EC name: (6-aminohexyl)carbamic acid

EC number: 205-581-6 INDEX no: n/a CAS no: 143-06-6

REACH (UK) Registration no: 01-9403278005-1-0002 REACH (EU) Registration no: 01-2120755360-60-0000 **GB-CLP Classification:** Flam. Sol. 2; H228

Eye Irrit. 2; H319,

Specific concentration limits: n/a

Acute toxicity estimation: oral > 2000 mg/kg

Dermal >2000 mg/kg

n/a

Inhalation n/a acute n/a. Chronic

Concentration ≥ 99.5%

## SECTION 4: FIRST AID MEASURES

## 4.1. Description of first aid measures

General indications Immediately call a doctor if you feel unwell or in case of doubt on health conditions, showing, if possible,

this safety data sheet. First responders must always wear appropriate personal protective equipment (see

SECTION 8.2).

Contact with the eyes: Rinse cautiously with water for several minutes, holding the eyelids open. If eye irritation persists, get

medical advice / attention.

Contact with the skin: Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation /

eruption occurs, get medical advice / attention.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, give

oxygen and immediately call a doctor.

Ingestion: Rinse mouth with water. Do not induce vomiting unless recommended by a doctor. Never give anything by

mouth if the person is not conscious. If you feel unwell, immediately call a doctor.

## 4.2 Most important symptoms, both acute and delayed

The substance causes eye irritation. Contact with dust can cause mechanical irritation or drying of the skin.

### 4.3 Indication of any immediate medical attention and special treatment needed.

For indication of any immediate medical attention, see SECTION 4.1. Basic first aid and symptomatic treatment.

## SECTION 5: FIREFIGHTING MEASURES.

## 5.1 Extinguishing media.

Suitable Extinguishing media suitable for Class A fires.

Unsuitable

## 5.2 Special hazards arising from the substance or mixture.

Flammable solid. Dust may form explosive mixtures with air. In case of fire, carbon oxides, nitrogen oxides and other toxic combustion products may be emitted.

## 5.3 Advice for firefighters

Evacuate and isolate the area until complete fire extinction, by limiting access only to trained personnel. Firefighters must always wear appropriate protective equipment; positive pressure self-contained breathing apparatus (ref. EN 137); fireproof clothing (ref EN 469); fireproof gloves (ref. EN 659); firefighter's boots (ref. HO A29-A30). Ensure adequate ventilation. Avoid breathing gases/vapours. Avoid contact with the eyes and skin. Stay upwind. Remove containers if it can be done without risk. Alternatively, cool the recipients exposed to fire with water spray. Prevent the contaminated extinguishing media flowing into drains or waterways.



# Intercure® 1

According to Regulation (EC) 1907/2006 (REACH)
As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page **3** of **7** 

### SECTION 6 ACCIDENTAL RELEASE MEARSURES.

#### 6.1 Personal precautions, protective equipment, and procedures in case of fire.

For non-emergency personnel In case of release of significant amounts of substance, evacuate the area and alert the emergency

personnel. Avoid generation of dust. Avoid breathing dust. Avoid contact with eyes and skin. Wear

appropriate protective equipment (See SECTION 8.2).

For emergency responders In case of release of significant amounts od substance, isolate the area and restrict the access only to

trained personnel. Ensure adequate ventilation. Remove all sources of ignition if it can be done without risk. Avoid generation of dust. Avoid breathing of dust. Avoid contact with eyes and skin. Wear appropriate

personal protective equipment (See SECTION 8.2)

### 6.2 Environmental precautions.

Prevent the substance from leaking into the environment and run off into drains, surface water and groundwater.

#### 6.3 Methods and material for containment and cleaning up.

Contain the spillage. Collect with mechanical means and transfer in a container suitable for disposal. Dispose of in accordance with local and national legislation. Clean surface thoroughly to remove residual contamination.

#### 6.4 Reference to other sections.

For information on personal protection see SECTION 8.2. For information on disposal see SECTION 13.1,

## SECTION 7: HANDLING AND STORAGE.

#### 7.1. Precautions for safe Handling.

Ensure adequate ventilation. Avoid generation of dust. If this can't be avoided, provide local exhaust ventilation suction. Avoid breathing dust. Avoid contact with eyes and skin. Wear appropriate personal protective equipment (see SECTION 8.2). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge. Ground / bond container and receiving equipment. Use explosion-proof equipment. Keep away from incompatible materials (see SECTION 10.5). Do not eat, drink or smoke during use. Wash hands thoroughly after handling. Remove contaminated clothing and personal protective equipment before entering eating areas. Wash periodically clothes and personal protective equipment to remove contaminants.

## 7.2 Conditions for safe storage, including any incompatibilities.

Store only in original container, tightly closed. Store in a cool, dry and well-ventilated place (temperature = 15 - 30 °C). Avoid, hot exposure to moisture and direct sunlight. Store away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge, Store away from incompatible materials (see SECTION 10.5)

## 7.3 Specific end use(s)

See SECTION 1.2

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION.

## 8.1 Control parameters.

DNEL - Workers - Dermal - Systemic effects - Long- term = 0.167 mg/kg bw/day

DNEL - General population - Dermal - Systemic effects - Long-term =0.083 mg/kg bw/day.

DNEL - General population - Oral - Systemic effects - Long-term = 0.083 mg/kg bw/day.

PNEC - Aqua (freshwater) = 0.016 mg/L

PNEC - Aqua (freshwater) = Intermittent releases = 0.162 mg/L.

PNEC - Aqua (marine water) = 0.002 mg/L

PNEC - Aqua (marine water) = Intermittent release = 0.016 mg/L

PNEC – Sediment (fresh water) = 0.058 mg/kg sediment dw.

PNEC – Sediment (marine water) = 0.006 mg/kg sediment dw.

PNEC - STP = 3.16 mg/L.

PNEC - Soil = 0.002 mg/kg soil dw

Monitoring procedures: Provide periodic sampling of the workplace in accordance with the indications of health surveillance. Refer

to current monitoring standards and national guidance documents on methods for the determination of

hazardous substances.

## 8.2 Exposure controls

Wear personal protective equipment (PPE) in accordance with standards set by applicable legislation. Consult the PPE's supplier in all cases Before making a final decision on the equipment to be used.

Skin protection Wear a type 5/6 coverall (ref: nitrile ISO 13982 -1).



## Intercure® 1

According to Regulation (EC) 1907/2006 (REACH)
As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page **4** of **7** 

Hand protection Wear work gloves impervious to chemical agents made of nitrile rubber (protective index 6 − thickness ≥

0.4 mm - permeation time > 480 minutes or equivalent (ref. EN 374) Replace gloves immediately in case

of contamination or breakage.

Eye protection Wear safety glasses with side shields (ref. EN 166)

Respiratory protection Not required under recommended conditions of use. In case of insufficient ventilation or risk of generation

of dust, wear a mask with a P2 type filter (ref. EN 143)

Technical and hygienic measures Provide local exhaust ventilation suction or other devices to maintain the levels of p articles in the air below

the recommended exposure limits. Equip with emergency showers and eyewash device the areas in which handling, and storage of the substance take place. Do not eat, drink, or smoke during use. Wash hands thoroughly after handling. Remove contaminated clothing and personal protective equipment before entering eating areas. Wash periodically clothes and personal protective equipment to remove

contaminants.

Environmental measures: Operate in accordance with the provisions of the relevant concerning the water protection and waste

management. Prevent the substance from leaking into the environment and run off into the drains, surtace

water and ground water.

Thermal hazards Not expected under recommended conditions of use and storage.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES.

## 9.1 Information on basic physical and chemical properties.

a) Physical state: powderb) Colour: whitec) Odour: ammonia

d) Melting point / freezing point 159.19 °C (decomposes) [ASTM E 1641-94]

e) Boiling point, or initial boiling point and boiling range decomposes before boiling

f) Flammability flammable solid [EU Method A 10.]

g) Lower / upper explosion limits not relevant (solid)
h) Flash point: not relevant (solid)
i) Auto-ignition temperature 410 °C [EU method A.16.]

j) Decomposition temperature decomposes at the melting point k) pH: 9.9 (1% aqueous solution – 20°C)

I) Kinematic viscosity not relevant (solid)

m) Solubility: 128.65 g/L (25°C) [OECD 105]

n) Partition coefficient: n-octanol /water (log/value): Log Know = -2.36 (QSAR – EP/Web v4.11)
o) Vapour pressure: Log Know = -2.36 (QSAR – EP/Web v4.11)
0.00989 Pa (25°C) [QSAR – EP/Web v4.11]

p) Density and / or relative density: 1.284 g/mL (OECD 109)
q) Relative vapour density: not relevant (solid)
r) Particle characteristics: 3.742 µm [ASTM B 822-92]

## 9.2 Other information

s) Explosive properties not explosive [EU Method A. 14.]

## SECTION 10. STABILITY AND REACTIVITY.

## 10.1 Reactivity

The substance is not reactive at standard conditions of temperature and pressure.

### 10.2. Chemical stability.

The substance is stable at standard conditions of temperature and pressure.

## 10.3 Possibility of hazardous reactions.

Dust may form explosive mixtures with air.

## 10.4 Conditions to avoid.

See SECTION 7.1 and SECTION 7.2.

## 10.5 Incompatible materials.

Acids and oxidising agent.

## 10.6 Hazardous decomposition products.

Following thermal decomposition, 1,6- hexanediamine and ammonia may be released.

## SECTION 11. TOXICOLOGICAL INFORMATION.



# Intercure® 1

According to Regulation (EC) 1907/2006 (REACH)
As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page **5** of **7** 

### 11.1 Information on hazard classes.

#### a) Acute toxicity

LD50 oral (rat) = 2875 mg/kg

LD50 dermal (rat) >2000 mg/kg (OECD 402)

Based on available data, the classification criteria are not met.

#### b) Skin corrosion / irritation

RHE test (human epidermis) → not irritant [OECD 437]

Based on available data, the classification criteria are not met.

### c) Serious eye damage / irritation

BCOP test (bovine cornea) → irritant [OECD 437]

Causes serious eye irritation.

## d) Respiratory or skin sensitisation,

LLNA test (mouse, lymph node)  $\rightarrow$  not sensitising [OECD 4428]

Based on available data, the classification criteria are not met.

## e) Germ cell mutagenicity.

Ames Test → negative [OECD 471]

Micronucleus test  $\rightarrow$  negative [OECD 487]

Mouse lymphoma test → negative [OECD 490]

Based on available data, the classification criteria are not met.

## f) Carcinogenicity

No carcinogenicity effect known.

## g) Reproductive toxicity

NOAEL (oral, rat, reproductive effects) =50mg/kg bw/day [OECD 422]

NOAEL (oral, rat, developmental effects) ~ 1000 mg/kg bw/day [OECD 422]

Based on available data, the classification criteria are not met.

## h) STOT – single exposure.

No STOT effect known after single exposure.

## i) <u>STOT – repeated exposure.</u>

NOAEL (oral, rat, subacute) = 50 mg/kg bw/day [OECD 422]

Based on available data, the classification criteria are not met.

## j) Aspiration hazard

Not relevant (solid).

## 11.2 Information on other hazards.

There are no known adverse health effects caused by the endocrine disrupting properties or other hazards than those mentioned above.

# SECTION 12: ECOLOGICAL INFORMATION.

## 12.1. Toxicity.

LC50 fishes (Danio rerio) > 15.7 mg/L (96 hours) [OECD 203]

EC50 invertebrates (Daphnia magna) = 16.2 MG/L (48 hours) [OECD 202.

EC50 algae (Desmodesmus) > 100 mg/L (72 hours) [OECD 201.

EC50 microorganisms (activated sludge) = 902 mg/L (3 hours) [OECD 209.

Based on available data, the classification criteria are not met.

## 12.2 Persistence and degradability.

Biodegradation = 84% (28 days) [OECD301 F)

Readily biodegradable.

### 12.3 Bioaccumulative potential.

Log Pow < 3

Not Bioaccumulative.



## Intercure® 1

According to Regulation (EC) 1907/2006 (R effects.EACH) As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page 6 of 7

## 12.4 Mobility in soil.

Koc = 0.064 (KOCWIN v 2.00 estimation) Low potential for adsorption to sediment.

### 12.5 Results of PBT and vPvB assessment.

The substance does not meet the criteria for PBT or vPvB classification.

## 12.6 Endocrine disrupting properties.

There are no known adverse effects on the environment caused by endocrine disrupting properties.

#### 12.7 Other adverse effects

There are no known other adverse effects on the environment than those mentioned above.

### SECTION 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods.

Substance: The substance must be managed as a hazardous waste. Dispose of in accordance with applicable legislation. Do not

discharge in to drains.

Packaging: Empty containers may contain hazardous residues and must be cleaned up according to appropriate methods and

then re-used or disposed of in accordance with applicable legislation.

## SECTION 14: TRANSPORT INFORMATION.

The substance is subject to the provisions of existing legislation governing the transport of dangerous goods by road (ADR), rail (RID), sea (IMDG Code) and air (IATA).

### 14.1 UN number or ID number.

ADR / RID: 1325 IMDG Code: 1325 IATA: 1325.

## 14.2 UN proper shipping name

ADR / RID: FLAMMABLE SOLID, ORGANIC, N.O.S. ((6-AMINOHEXYL)CARBAMIC ACID)
IMDG Code: FLAMMABLE SOLID, ORGANIC, N.O.S. ((6-AMINOHEXYL)CARBAMIC ACID)
IATA: FLAMMABLE SOLID, ORGANIC, N.O.S. ((6-AMINOHEXYL)CARBAMIC ACID)

## 14.3 Transport hazard class(es)

ADR / RID: 4.1 IMDG Code: 4.1 IATA; 4.1

## 14.4 Packing group.

ADR / RID: III
IMDG Code: III
IATA: III

### 14.5 Environmental hazards

The substance is not hazardous to the environment.

### 14.6 Special precautions for user

ADR / RID: Kemler no = 40

Tunnel code = (E)

IMDG Code: EMS no = F-A, S-G

IATA: -

# 14.7 Maritime transport in bulk according to IMO instruments.

Not applicable.

# SECTION 15. REGULATORY INFORMATION.

## 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture. 59);

<u>Substances of very high concern included in the candidate list for Authorisation (REACH, article).</u>
None.



## Intercure® 1

According to Regulation (EC) 1907/2006 (REACH)
As amended by UK REACH Regulations SI 2019/758

Date: 03/2023 Page **7** of **7** 

Substances subjected to Authorization (REACH, Annex XIV):

None.

Restrictions (REACH, Annex XV11);

Entry nº 40.

## 15.2 Chemical safety assessment.

A chemical safety assessment has been performed for the substance.

## SECTION 16. OTHER INFORMATION

### Revision:

The main changes introduced to the previous version of this safety data sheet regard SECTIONS 2, 3, 9, 11 and 12.

### Key references and data sources.

(6-aminohexyl)carbamic acid – REACH registration dossier

### Advice on any training appropriate for workers:

The staff responsible for handling the substance should be informed about its hazards and potential risks related to its use and be instructed on the precautions to be taken to avoid or limit exposure.

Acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

CAS: chemical abstract service

CLP: classification labelling and packaging

DNEL: derived no effect level EC50: median effective level

IATA: international air transport association
IMDG Code: international maritime dangerous goods code

LC50: median lethal concentration

LD50: median lethal dose

NOAEL: no observed adverse effect level
PBT: persistent, bioaccumulative and toxic
PNEC: predicted no effect concentration.

REACH: registration, evaluation, and authorisation of chemicals.

RID: regulations concerning the international carriage of goods by rail.

vPvB very persistent and very Bioaccumulative

## NOTES:

The information provided in this safety data sheet is correct to the best of our knowledge at the date of its publication. The indications give are designed only as a guidance for safe handling, use, processing, storage, transportation and disposal and is not to be considered a warranty. or quality specification. The user must verify their suitability and completeness, also in accordance with its particular use of the substance.