

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.02.2013

Revision: 28.02.2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**

- **Trade name:** Formamide

- **Article number:** 30-79-05

- **CAS Number:**
75-12-7

- **EC number:**
200-842-0

- **Index number:**
616-052-00-8

- **Registration number** 01-2119496064-35

- **Relevant identified uses of the substance or mixture and uses advised against**

Use as intermediate; Manufacture of another substance; Use as laboratory chemical; Reagent chemicals; Use as a solvent.

- **Sector of Use**

SU0 Other

SU 0-1 Manufacture of basic pharmaceutical products and pharmaceutical preparations

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU8 Manufacture of bulk, large scale chemicals (including petroleum products)

SU9 Manufacture of fine chemicals

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU24 Scientific research and development

- **Product category**

PC0 Other

PC19 Intermediate

PC21 Laboratory chemicals

PC29 Pharmaceuticals

- **Process category**

PROC1 Use in closed process, no likelihood of exposure

PROC2 Use in closed, continuous process with occasional controlled exposure

PROC3 Use in closed batch process (synthesis or formulation)

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises

PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC10 Roller application or brushing

PROC15 Use as laboratory reagent

- **Environmental release category**

ERC1 Manufacture of substances

ERC2 Formulation of preparations

ERC4 Industrial use of processing aids in processes and products, not becoming part of articles

ERC6a Industrial use resulting in manufacture of another substance (use of intermediates)

ERC6b Industrial use of reactive processing aids

ERC7 Industrial use of substances in closed systems

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8b Wide dispersive indoor use of reactive substances in open systems

ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8d Wide dispersive outdoor use of processing aids in open systems

- **Application of the substance / the preparation**

Industrial intermediate.

Solvent.

Laboratory chemical.

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- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Severn Biotech Ltd.

Unit 2,

Park Lane,

Kidderminster,

Worcestershire.

DY11 6TJ

UK

Tel: 0044 1562 825286

Fax: 0044 1562 825284

email: info@severnbiotech.com

- **Further information obtainable from:** Product safety department.

- **Emergency telephone number:** Tel: 0044 1562 825286 (not 24 hours)

2 Hazards identification

- **Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 1B H360D May damage the unborn child.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

Repr. Cat. 2

R61: May cause harm to the unborn child.

- **Information concerning particular hazards for human and environment:** Not applicable.

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

- **Hazard pictograms** GHS08

- **Signal word** Danger

- **Hazard statements**

H360D May damage the unborn child.

- **Precautionary statements**

P281 Use personal protective equipment as required.

P270 Do not eat, drink or smoke when using this product.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe mist/vapours/spray.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Substances

- **CAS No. Description**

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- **Identification number(s)**
- **EC number:** 200-842-0
- **Index number:** 616-052-00-8

SVHC	
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4 First aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
Seek medical treatment.
- **Information for doctor:** Treat symptomatically and supportively.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Burning may produce toxic and irritant gases: ammonia, hydrogen cyanide (hydrocyanic acid), carbon monoxide, nitrogen oxides (NO_x).
- **Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Keep ignition sources away - no smoking.
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - Open and handle receptacle with care.
 - Prevent formation of aerosols.
 - Ensure good ventilation/exhaustion at the workplace.
 - Avoid direct contact (skin contact, ingestion and/or inhalation of fume/mist/dust) with the product.
 - Use only in closed systems.
- **Information about fire - and explosion protection:**
 - Keep ignition sources away - Do not smoke.
 - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**
 - Store away from oxidizing agents.
 - Store away from metals.
 - Store away from foodstuffs.
- **Further information about storage conditions:**
 - Store in a banded area.
 - Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

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WEL	Short-term value: 56 mg/m ³ , 30 ppm
	Long-term value: 37 mg/m ³ , 20 ppm

- **DNELs**
- WORKERS
- Long-term exposure - systemic effects
- Dermal DN(M)EL
 - DNEL (Derived No Effect Level): 0.952 mg/kg bw/day
- Inhalation DN(M)EL
 - DNEL (Derived No Effect Level): 0.66 mg/m³
- Long-term exposure - local effects
- Inhalation DN(M)EL
 - DNEL (Derived No Effect Level): 6.66 mg/m³
- **PNECs**
- PNEC aqua (freshwater): 0.5 mg/L
- PNEC aqua (marine water): 0.5 mg/L
- PNEC aqua (intermittent releases): 5 mg/L
- PNEC STP: 100 mg/L
- PNEC sediment (freshwater): 1.26 mg/kg sediment dw
- PNEC soil: 0.151 mg/kg soil dw

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- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
Select PPE appropriate for the operations taking place taking into account the product properties.
- **General protective and hygienic measures:**
Pregnant women should strictly avoid inhalation or skin contact.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Storing food in the working area is prohibited.
Ensure that eyewash stations and safety showers are close to the workstation location.
Take note of assigned Workplace Exposure Limits.
A safe system of work must be formulated and followed to ensure that workers who may be pregnant or breastfeeding do not come into direct contact with the product.
A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.
Depending on the degree of exposure, periodic medical examination is suggested.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
In case of insufficient ventilation, wear suitable respiratory equipment. (filter ABEK-P2)
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Glove material: Solvent-resistant gloves (butyl-rubber)
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling
- **Body protection:**
Impervious protective clothing
Wear nitrile rubber boots.

9 Physical and chemical properties

- | | |
|--|-----------------|
| · Information on basic physical and chemical properties | |
| · General Information | |
| · Appearance: | |
| Form: | Fluid |
| Colour: | Yellowish |
| · Odour: | Odourless |
| · Odour threshold: | Not determined. |
| · pH-value: | Not determined. |
| · Change in condition | |
| Melting point/Melting range: | 2.5 °C |
| Boiling point/Boiling range: | 218 °C |
| · Flash point: | 152 °C |

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· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	>400 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	0.03 hPa
· Density at 20 °C:	1.08 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient (n-octanol/water):	-0.82 log POW
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** Corrodes metals: Aluminium, Iron, Copper. Corrodes natural rubber.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Oxidizing agents, Acids, Bases, iodine, pyridine, sulphur trioxide, Aluminium, Iron, Copper, natural rubber.
- **Hazardous decomposition products:**
Ammonia, hydrogen cyanide (hydrocyanic acid), carbon monoxide, nitrogen oxides (NOx).

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

Oral	LD50	5570 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rat)
Inhalative	LC50/4 h	>21 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
Effects of long-term or repeated exposure: Animal tests indicate that this substance possibly causes toxic effects upon human reproduction.

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- **Additional toxicological information:**

Routes of exposure: The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

Inhalation risk: A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20 degs. C.

Effects of short-term exposure: The substance is slightly irritating to the eyes and skin. The substance may cause effects on the central nervous system.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Repr. 1B

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

EC50	>100 mg/kg (daphnia)
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- **Persistence and degradability** biodegradable

- **Behaviour in environmental systems:**

- **Bioaccumulative potential** Product is not expected to bioaccumulate.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **European waste catalogue**

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined.

Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- **Uncleaned packaging:**

- **Recommendation:**

Disposal must be made according to official regulations.

Container remains hazardous when empty. Continue to observe all precautions.

Do not mix with other waste streams.

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number	Void
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	Void
· ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Other regulations, limitations and prohibitive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

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· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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