Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: Deionised Formamide**

· **Product Code:** 30-63-05
· **CAS Number:**
75-12-7
· **EC number:**
200-842-0
· **Index number:**
616-052-00-8
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Product category** PC21 Laboratory chemicals
· **Application of the substance / the mixture** Laboratory reagent
· **Uses advised against** The product is stictly intended for industrial or professional use only.

· **1.3 Details of the supplier of the safety data sheet**
· **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.
· **1.4 Emergency telephone number:**
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

* SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to GB-CLP**

Repr. 1B	H360D	May damage the unborn child.
STOT RE 2	H373	May cause damage to the blood tissue and the cardiovascular system through prolonged or repeated exposure.

· **2.2 Label elements**
· **Labelling according to GB-CLP** The substance is classified and labelled according to the GB CLP regulation.
· **Hazard pictograms**

GHS08

· **Signal word** Danger
· **Hazard statements**
H360D May damage the unborn child.

(Contd. on page 2)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 1)

H373 May cause damage to the blood tissue and the cardiovascular system through prolonged or repeated exposure.

· **Precautionary statements**
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

*
SECTION 3: Composition/information on ingredients

· **3.1 Substances**
· **CAS No. Description**
CAS: 75-12-7 Formamide
· **Identification number(s)**
· **EC number:** 200-842-0
· **Index number:** 616-052-00-8

· **SVHC**	
CAS: 75-12-7	Formamide

*
SECTION 4: First aid measures

· **4.1 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. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
· **Information for doctor:** Treat symptomatically and supportively.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

*
SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 2)

Use fire extinguishing methods suitable to surrounding conditions.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Ammonia
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)
· **5.3 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.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

*
SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Keep ignition sources away - no smoking.
· **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
· **6.3 Methods and material for containment and cleaning up:**
Contain and collect spillage with non-combustible, absorbent material e.g.sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
· **6.4 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.

*
SECTION 7: Handling and storage

· **7.1 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/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
Whenever possible, carcinogenic and mutagenic substances should only be used in closed apparatus. If release of the substance cannot be prevented, then it should be extracted at the point of exit.
Safety showers and eye wash facilities should be available at the work area.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.

(Contd. on page 4)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 3)

· **7.2 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 oxidising agents.
Store away from metals.
Store away from foodstuffs.
· **Further information about storage conditions:**
Store under lock and key and with access restricted to technical experts or their assistants only.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
· **Storage class:** 6.1 C
· **7.3 Specific end use(s)** No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 75-12-7 Formamide	
WEL	Short-term value: 56 mg/m³, 30 ppm Long-term value: 37 mg/m³, 20 ppm

· **DNELs**		
Dermal	Long-term systemic effects	952 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	6.6 mg/m³ (worker)

· **PNECs**	
Freshwater	500 µg/L
Freshwater - Intermittent releases	5 mg/L
Marine water	500 µg/L
Sewage Treatment Plant	100 mg/L
Sediment (freshwater)	1.26 mg/kg
Soil	151 µg/kg

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see section 7.
· **Individual protection measures, such as personal protective equipment**
· **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.

(Contd. on page 5)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 4)

Take note of assigned Workplace Exposure Limits.
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:**
Handle product in a fume cupboard.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter ABEK-P2

· **Hand protection**

Protective gloves.
Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

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**
Nitrile rubber, NBR
Butyl rubber, BR
Chloroprene rubber, CR
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.

· **Penetration time of glove material**
Break-through time: > 480 minutes
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**

Safety glasses with side-shields conforming to EN166.
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

· **Body protection:**

Impervious protective clothing

Do not get on skin or clothing. Wear clothing and footwear that cannot be penetrated by the product. Suitable protective equipment may include: Chemical resistant boots, Chemical resistant apron, Full chemical protective suit with a hood, Chemical protective suit consisting of a jacket and trousers. The jacket should be buttoned up to the neck, sleeves sealed at the gloves, and trouser legs worn outside the boots. These precautions are required to prevent the clothing from accidentally trapping product against the skin.

· **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.
· **Risk management measures** The operators shall be instructed adequately.

*
SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Physical state**	Liquid
· **Colour:**	Colourless
· **Odour:**	Odourless

(Contd. on page 6)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 5)

· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	2.6 °C
· **Boiling point or initial boiling point and boiling range**	218 °C
· **Flammability**	Not applicable.
· **Lower and upper explosion limit**	
· **Lower:**	5.6 Vol %
· **Upper:**	15.9 Vol %
· **Flash point:**	152 °C
· **Auto-ignition temperature:**	500 °C
· **Decomposition temperature:**	Not determined.
· **pH**	Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	Not determined.
· **Dynamic at 20 °C:**	3.764 mPas
· **Solubility**	
· **water:**	Fully miscible.
· **Partition coefficient n-octanol/water (log value)**	-0.82 log POW
· **Vapour pressure at 20 °C:**	0.06 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1.13 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Liquid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Not determined.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Molecular weight**	45.02 g/mol
· **Change in condition**	
· **Evaporation rate**	Not determined.

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void

(Contd. on page 7)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 6)

· **Desensitised explosives**	Void

*
SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **10.3 Possibility of hazardous reactions** Reacts violently with oxidising agents.
· **10.4 Conditions to avoid** Heat and static discharge.
· **10.5 Incompatible materials:**
Strong acids.
Strong bases.
Strong oxidising agents.
· **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Ammonia
Hydrogen cyanide
Nitrogen oxides (NOx)

*
SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
Oral	LD50	5,570 mg/kg (rat)
Dermal	LD50	> 3,000 mg/kg (rat)
Inhalative	LC50/4 h	> 21 mg/l (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity**
May damage the unborn child.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure**
May cause damage to the blood tissue and the cardiovascular system through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **Additional toxicological information:**
ROUTES OF EXPOSURE: Can be absorbed into the body by ingestion, by inhalation (mist and vapour) and through the skin.
EFFECTS OF SHORT-TERM EXPOSURE: The substance may cause effects on the central nervous system, resulting in excitement and convulsions.

(Contd. on page 8)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 7)

· **11.2 Information on other hazards**
· **Endocrine disrupting properties** Substance is not listed.

*
SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
EC50 (96 h)	> 100 mg/l (Bacteria)
EC50 (48 h)	500 mg/l (aquatic invertebrates)
EC50 (72 h)	500 mg/l (aquatic algae and cyanobacteria)

· **12.2 Persistence and degradability** biodegradable
· **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **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.

*
SECTION 13: Disposal considerations

· **13.1 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.

· **Uncleaned packaging:**
· **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Disposal must be made according to official regulations.
Do not mix with other waste streams.
Containers, even those that are “empty,” may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

(Contd. on page 9)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 8)

SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	Not applicable
· **14.2 UN proper shipping name**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	Not applicable
· **14.3 Transport hazard class(es)**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	
· **Class**	Not applicable
· **14.4 Packing group**	
· **ADR/RID/ADN, IMDG, IATA**	Not applicable
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **Transport/Additional information:**	Not dangerous according to the above specifications.
· **UN "Model Regulation":**	Not applicable

*
SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Poisons Act**
· **Regulated explosives precursors** Substance is not listed.
· **Regulated poisons** Substance is not listed.
· **Reportable explosives precursors** Substance is not listed.
· **Reportable poisons** Substance is not listed.

· **Control Of Major Accident Hazards Regulations 2015 (COMAH)**
· **Named dangerous substances - ANNEX I** Substance is not listed.

· **National regulations:**

· **Substances of very high concern (SVHC) according to UK REACH**	
CAS: 75-12-7	Formamide

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

*
SECTION 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.
This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Training hints**
This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

· **Department issuing SDS:** Product safety department.

(Contd. on page 10)

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 14.03.2025 Version number 3 (replaces version 2) Revision: 14.03.2025

Trade name: Deionised Formamide

(Contd. of page 9)

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Repr. 1B: Reproductive toxicity – Category 1B
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
· *** Data compared to the previous version altered.**