

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 1 of 12

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

**1.1. Product identifier**

Formamide a.r.

REACH Registration Number: 01-2119496064-35-XXXX  
CAS No: 75-12-7  
Index No: 616-052-00-8  
EC No: 200-842-0

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

**Use of the substance/mixture**

Reagents and laboratory chemicals  
Only for laboratory and analysis purposes.

**Uses advised against**

Do not use for private purposes (household).

**1.3. Details of the supplier of the safety data sheet**

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

Company name: AnalytiChem Services, Unipessoal, Lda  
Street: Rua de Júlio Dinis 676 7º  
Place: N-4050-320 Porto  
Telephone: +351 226002917  
E-mail: info@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Internet: www.analytichem.com  
Responsible Department: SDS service department

**Supplier or manufacturer details**

Company name: AnalytiChem Belgium NV  
Street: Industriezone "De Arend" 2  
Place: B-8210 Zedelgem  
Telephone: +32 50 28 83 20  
E-mail: info.be@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Responsible Department: AnalytiChem:  
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20  
EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200  
EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848  
UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500  
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378  
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701  
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333  
+44 20 3807 3798 (CHEMTREC)

**1.4. Emergency telephone number:**

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 2 of 12

**Further Information**

No data available

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Carc. 2; H351

Repr. 1B; H360D

STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

H351

Suspected of causing cancer.

H360FD

May damage fertility. May damage the unborn child.

H373

May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P201

Obtain special instructions before use.

P202

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

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P280

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

P308+P313

IF exposed or concerned: Get medical advice/attention.

P405

Store locked up.

**Special labelling**

Restricted to professional users.

**SECTION 3: Composition/information on ingredients****3.1. Substances**Sum formula: HCONH<sub>2</sub>

Molecular weight: 45,04 g/mol

**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
75-12-7	formamide			100 %
	200-842-0	616-052-00-8	01-2119496064-35-XXXX	
	Carc. 2, Repr. 1B, STOT RE 2; H351 H360D H373			

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

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 3 of 12

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
75-12-7	200-842-0	formamide	100 %
		dermal: LD50 = > 3000 mg/kg; oral: LD50 = ca. 5325 mg/kg	

**Further Information**

This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

No data available

**After inhalation**

Provide fresh air.

Call a physician immediately.

**After contact with skin**

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

**After contact with eyes**

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

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

Consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

**4.2. Most important symptoms and effects, both acute and delayed**

Ataxie

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

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

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

Combustible liquids

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NOx)

Hydrogen cyanide (hydrocyanic acid)

**5.3. Advice for firefighters**

Do not inhale explosion and combustion gases.

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 4 of 12

Avoid contact with skin, eyes and clothes.

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

**Additional information**

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

Avoid exposure - obtain special instructions before use.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation.

Avoid contact with skin, eyes and clothes.

## Formamide a.r.

Revision: 25.08.2025

Product code: AC19.00262

Page 5 of 12

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

**Further information on handling**

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

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

Store in a well-ventilated place. Keep container tightly closed.

Store in a place accessible by authorized persons only.

**Hints on joint storage**

Take national regulations into account./ National regulations

**Further information on storage conditions**

Store in a dry place.

Keep cool. Protect from sunlight.

storage temperature +2°C - +25°C

**7.3. Specific end use(s)**

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
75-12-7	Formamide	20	37		TWA (8 h)	WEL
		30	56		STEL (15 min)	WEL

**DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
75-12-7	formamide			
Worker DNEL, long-term		inhalation	systemic	6,6 mg/m³
Worker DNEL, long-term		dermal	systemic	0,952 mg/kg bw/day

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 6 of 12

**PNEC values**

CAS No	Substance	
Environmental compartment		Value
75-12-7	formamide	
Freshwater		0,5 mg/l
Freshwater (intermittent releases)		5 mg/l
Marine water		0,5 mg/l
Freshwater sediment		1,26 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,151 mg/kg

**Additional advice on limit values**

Observe in addition any national regulations!

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe gas/fumes/vapour/spray.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

goggles

Wear eye protection/face protection.

**Hand protection**

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) with the following specification (test according to EN 374):

By long-term hand contact

Trade name/designation KCL 720 Camapren®

Recommended material: CR (polychloroprene, chloroprene rubber) 0,65 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 450 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Skin protection**

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 7 of 12

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: A

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Thermal hazards**

No data available

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

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

Physical state:	Liquid
Colour:	colourless
Odour:	like: Ammonia
Odour threshold:	No data available
Melting point/freezing point:	2 °C
Boiling point or initial boiling point and boiling range:	210 °C
Flammability:	No data available
Lower explosion limits:	2,7 vol. %
Upper explosion limits:	19 vol. %
Flash point:	175 °C
Auto-ignition temperature:	500 °C
Decomposition temperature:	>180 °C
pH-Value (at 20 °C):	8-10 (200 g/l)
Viscosity / kinematic:	No data available
Water solubility:	Soluble in: Water
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	log Pow: -0,82 (25 °C)
Dispersion stability:	No data available
Vapour pressure:	0,32 hPa
(at 50 °C)	
Vapour pressure:	0,08 hPa
(at 20 °C)	
Density:	1,13 g/cm <sup>3</sup>
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

**9.2. Other information****Information with regard to physical hazard classes****Explosive properties**

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

**Sustained combustibility:**

No data available

**Self-ignition temperature**

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 8 of 12

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

**Other safety characteristics**

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

No data available

Solid content:

0

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available:

Viscosity / dynamic:

3,75 mPa·s

(at 20 °C)

Flow time:

No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

**10.2. Chemical stability**

Protect against: Heat

**10.3. Possibility of hazardous reactions**

Alkali (lye)

Oxidising agent

Hydrogen peroxide

Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>)**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

Metal

The product develops hydrogen in an aqueous solution in contact with metals.

**10.6. Hazardous decomposition products**

In case of fire may be liberated:

SECTION 5: Firefighting measures

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes****Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

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



**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 9 of 12

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
75-12-7	formamide				
	oral	LD50 ca. 5325 mg/kg	Rat	Study report (1963)	OECD Guideline 401
	dermal	LD50 > 3000 mg/kg	Rat	Study report (1985)	other: OECD Guideline 411

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer. (formamide)

May damage fertility. May damage the unborn child.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

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

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure. (formamide)

blood

heart

**Aspiration hazard**

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

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards****Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

Ataxie

Liver and kidney damage

**SECTION 12: Ecological information****12.1. Toxicity**

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

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 10 of 12

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
75-12-7	formamide					
	Acute fish toxicity	LC50 mg/l	6569	96 h	Leuciscus idus	Study report (1989) other: German Industrial Standard DIN 38
	Acute algae toxicity	ErC50 mg/l	> 500	72 h	Desmodesmus subspicatus	Study report (1988) other: German Industrial Standard DIN 38
	Acute crustacea toxicity	EC50 mg/l	> 500	48 h	Daphnia magna	Study report (1988) EU Method C.2
	Acute bacteria toxicity	EC50 mg/l ( )	> 1000	0,5 h	activated sludge from laboratory waste water plant	Study report (2004) OECD Guideline 209

**12.2. Persistence and degradability**

99 %; 28 d; aerob

OECD-301A

Readily biodegradable (according to OECD criteria).

**12.3. Bioaccumulative potential**

log Pow: -0,82 (25 °C)

No indication of bioaccumulation potential.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
75-12-7	formamide	-0,82

**BCF**

CAS No	Chemical name	BCF	Species	Source
75-12-7	formamide	3,16		Secondary source (20

**12.4. Mobility in soil**

log Koc: 1,101 (MSDS)

**12.5. Results of PBT and vPvB assessment**

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

**12.6. Endocrine disrupting properties**

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

**12.7. Other adverse effects**

No data available

**Further information**

Do not allow to enter into surface water or drains.

Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a hazardous waste incinerator facility under observation of official regulations .

Do not empty into drains.

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 11 of 12

**Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

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

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 75

Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

1 - slightly hazardous to water

**SECTION 16: Other information**

**Formamide a.r.**

Revision: 25.08.2025

Product code: AC19.00262

Page 12 of 12

**Changes**

This data sheet contains changes from the previous version in section(s): 7,8,9,12.

**Abbreviations and acronyms**

Carc. 2: Carcinogenicity, hazard category 2

Repr. 1A: Reproductive toxicity, hazard category 1A

Repr. 1B: Reproductive toxicity, hazard category 1B

STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2

**Relevant H and EUH statements (number and full text)**

H351 Suspected of causing cancer.

H360D May damage the unborn child.

H360FD May damage fertility. May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

**Further Information**

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.