

# Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

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## SECTION 1: Identification

### Product identifier

Trade name/designation:	Formamide, deionized ULTRA PURE
Product No.:	0606
Synonymes:	none/none
CAS No.:	75-12-7
Other means of identification:	

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

Recommended Use:	For Further Manufacturing Use Only
Uses advised against:	Not for Human or Animal Drug Use

### Details of the supplier of the safety data sheet

#### Supplier

##### **VWR International**

Street	2360 Argentia Road
Postal code/City	Mississauga, Ontario
	Canada L5N 5Z7
Telephone	+1-800-932-5000 toll-free within US/Canada
Telefax:	+1-610-728-2103

**Emergency phone number**

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

**Preparation Information**

VWR International - Product Information Compliance

E-mail sds@vwr.com

**SECTION 2: Hazard identification**

**2.1 Classification of the substance or mixture**

**Classification according to Hazardous Products Regulation (SOR/2015-17)**

Hazard classes and hazard categories	Hazard statements
Carcinogenicity, category 2	H351
Reproductive toxicity, category 1B	H360
Specific target organ toxicity (repeated exposure), category 2	H373

**2.2 Label elements**

**Labelling in accordance with (SOR/2015-17)**

**Hazard pictograms**



**Signal word:** Danger

Hazard statements	
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements	
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.

**Hazards not otherwise classified (HNOC)**

none/none

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Substance name	Formamide
Molecular formula	CH <sub>3</sub> NO
Molecular weight	45.04 g/mol
CAS No.	75-12-7

## SECTION 4: First aid measures

### 4.1 General information

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### In case of inhalation

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

#### In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

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

no data available

### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

### 4.5 Information to physician

no data available

## SECTION 5: Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

The product itself does not burn.

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

**Extinguishing media which must not be used for safety reasons**

no restriction

**5.2 Specific hazards arising from the chemical**

In case of fire may be liberated:

Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)

**5.3 Advice for firefighters**

DO NOT fight fire when fire reaches explosives.  
Protective equipment and precautions for firefighters  
Wear a self-contained breathing apparatus and chemical protective clothing.

**Additional information**

Do not allow run-off from fire-fighting to enter drains or water courses.  
Do not inhale explosion and combustion gases.  
Use water spray/stream to protect personnel and to cool endangered containers.  
In case of fire: Evacuate area.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

In case of major fire and large quantities: Remove persons to safety.

**6.2 Environmental precautions**

Discharge into the environment must be avoided.

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

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

**6.4 Additional information**

Clear spills immediately.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

Avoid exposure - obtain special instructions before use.  
Avoid:  
Inhalation  
Avoid contact with eyes and skin.  
Provide adequate ventilation as well as local exhaustion at critical locations.  
Usual measures for fire prevention.

**7.2 Conditions for safe storage, including any incompatibilities**

Recommended storage temperature: Store between 2 °C and 8 °C.  
Keep container tightly closed and in a well-ventilated place. Always close containers tightly after the removal of product.

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredient (Designation)	Regulatory information	Country	Limit value type (country of origin)	Limit value
Formamide	CNESST	CA	VEMP	18 mg/m <sup>3</sup> - 10 ppm

### 8.2 Engineering 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.

#### Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

#### *Eye/face protection*

Eye glasses with side protection

#### *Skin protection*

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

#### By short-term hand contact

Suitable material: NBR (Nitrile rubber)  
 Thickness of the glove material: 0,12 mm  
 Breakthrough time (maximum wearing time): 240-480 min

#### By long-term hand contact

Suitable material: NBR (Nitrile rubber)  
 Thickness of the glove material: 0,38 mm  
 Breakthrough time (maximum wearing time): > 480 min

#### *Respiratory protection*

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### *Additional information*

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

#### *Environmental exposure controls*

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	liquid
Color:	colorless
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	4-5 (200 g/l; H <sub>2</sub> O; 20 °C)
(e) Melting point/freezing point:	2 °C
(f) Initial boiling point and boiling range:	210 °C (1013 hPa)
(g) Flash point:	154 °C (closed cup)
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	not applicable
(j) Flammability or explosive limits	
Lower explosion limit:	2.7 % (v/v)
Upper explosion limit:	19 % (v/v)
(k) Vapour pressure:	30 mmHg (130 °C)
(l) Vapour density:	1.56 (20 °C)
(m) Relative density:	1.1334 g/cm <sup>3</sup> (20 °C)
(n) Solubility(ies)	
Water solubility (g/L):	soluble (20 °C)
Soluble (g/L) in Ethanol:	no data available
(o) Partition coefficient: n-octanol/water:	-1.51 (20 °C)
(p) Auto-ignition temperature:	500 °C (DIN 51794)
(q) Decomposition temperature:	no data available
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	3.75 mPa*s (20 °C)
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable

### 9.2 Other information

Bulk density:	no data available
Refraction index:	1.44911 (589 nm; 20 °C)
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

## 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*

LD50: > 5800 mg/kg - Rat - (Merck KGaA)

*Acute dermal toxicity:*

LD50: > 17000 mg/kg - Rabbit - (Merck KGaA)

*Acute inhalation toxicity:*

LC50: > 3900 ppm - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

#### Irritant and corrosive effects

*Primary irritation to the skin:*

not applicable

*Irritation to eyes:*

not applicable

*Irritation to respiratory tract:*

not applicable

#### Respiratory or skin sensitization

In case of skin contact: not sensitising

In case of inhalation: not sensitising

#### STOT-single exposure

not applicable

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

May damage fertility or the unborn child.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

**SECTION 12: Ecological information**

**12.1 Ecotoxicity**

**Fish toxicity:**

no data available

**Daphnia toxicity:**

no data available

**Algae toxicity:**

no data available

**Bacteria toxicity:**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water: -1.51 (20 °C)

**12.4 Mobility in soil:**

no data available

**12.5 Results of PBT/vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.



## 12.6 Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal. Send to a hazardous waste incinerator facility under observation of official regulations.

Waste code product: no data available

#### Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

#### Additional information

no data available

## SECTION 14: Transport information

### Land transport (TDG)

No dangerous good in sense of this transport regulation.

### Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

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

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Domestic Substance List:

## SECTION 16: Other information

### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
DOT - Department of Transportation  
IARC - International Agency for Research on Cancer  
IATA-DGR - International Air Transport Association-Dangerous Goods Regulations  
ICAO-TI - International Civil Aviation Organization-Technical Instructions  
IMDG - International Maritime Code for Dangerous Goods  
LTV - Long Term Value  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety & Health Administration  
PBT - Persistent, Bioaccumulative and Toxic  
PEL - Permissible Exposure Limit  
STV - Short Term Value  
SVHC - Substances of Very High Concern  
TDG - Transport of Dangerous Goods  
TLV - Threshold Limit Value  
vPvB - very Persistent, very Bioaccumulative

### Additional information

Indication of changes:                    general update

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.*