

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 4/13/2015 Revision date: 9/20/2023 Supersedes: 8/10/2018 Version: 2.0

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL

Product code : ULM-6721-S

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Cambridge Isotope Laboratories, Inc.

50 Frontage Rd

01810

ANDOVER, MA, 01810

USA

T 1-800-322-1174

cilsales@isotope.com - www.isotope.com

#### 1.4. Emergency telephone number

Emergency number : 1-703-741-5970

Chemtrec 1-800-424-9300 24 hours

## **SECTION 2: Hazard(s) identification**

## 2.1. Classification of the substance or mixture

#### **GHS US classification**

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 3	H301	Toxic if swallowed
Acute toxicity (dermal) Category 3	H311	Toxic in contact with skin
Acute toxicity (inhalation:vapor) Category 3	H331	Toxic if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Carcinogenicity Category 1B	H350	May cause cancer (Dermal, Inhalation, oral)
Reproductive toxicity Category 2	H361	blood, brain, liver (Dermal, Inhalation, oral)
Specific target organ toxicity (single exposure) Category 1	H370	Causes damage to organs (eyes, kidneys, liver, heart, central
		nervous system) (Dermal, Inhalation, oral)

Full text of H statements : see section 16

## 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)







Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

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Precautionary statements (GHS US)

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H315 - Causes skin irritation

H319 - Causes serious eye irritation

H350 - May cause cancer (Dermal, Inhalation, oral)

H361 - blood, brain, liver (Dermal, Inhalation, oral)

H370 - Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral)

: P201 - Obtain special instructions before use.

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

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

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe fume, mist, spray, vapors.

P261 - Avoid breathing fume, mist, spray, vapors.

P264 - Wash Both hands thoroughly after handling.

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

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

P301+P310 - If swallowed: Immediately call a poison center or doctor.

P302+P352 - If on skin: Wash with plenty of water.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P311 - Call a poison center or doctor.

P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see Hazard pictograms (CLP) on this label).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

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

P361 - Take off immediately all contaminated clothing.

P362 - Take off contaminated clothing and wash before reuse.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water spray to extinguish.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to Comply with applicable regulations.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
100% METHANOL UNLABELED	CAS-No.: 67-56-1	99.873737	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370
ACRYLAMIDE UNLABELED	CAS-No.: 79-06-1	0.13	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Muta. 1A, H340 Carc. 1B, H350 Repr. 2, H361 STOT RE 1, H372 Aquatic Acute 3, H402

Full text of hazard classes and H-statements: see section 16

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately

call a poison center or doctor/physician. First-aid measures after skin contact

Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a poison center or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

First-aid measures after ingestion : Rinse mouth. Obtain emergency medical attention. Immediately call a poison center or doctor/physician.

#### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms

: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach.

Symptoms/effects May cause cancer (in contact with skin, if inhaled, if swallowed). May cause damage to organs (Eyes, heart, kidneys, liver, central nervous system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).

: Toxic if inhaled. May cause respiratory irritation.

Symptoms/effects after inhalation

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Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

hazard

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Dry sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing. Wear recommended personal protective equipment.

Other information : Use water spray to cool exposed surfaces.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Do not breathe dust, mist, gas, spray, vapors, fume. Avoid contact

with skin, eyes and clothing. Ventilate spillage area. Remove all sources of ignition. No open flames, no sparks, and no smoking. Ensure adequate air ventilation. Special attention should be

given to low areas/pits where flammable vapors can accumulate.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

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

For containment : Dike and contain spill. For large spills, confine the spill in a dike and charge it with wet sand or

earth for subsequent safe disposal. Small quantities of liquid spill: take up in non-combustible

absorbent material and shovel into container for disposal.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters. This material and its container must be disposed of in a safe way, and as per local

legislation.

Other information : Dispose of materials or solid residues at an authorized site.

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#### 6.4. Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling

: No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment.

Storage conditions : Store refrigerated (-5 °C to 5 °C). Protect from light.

Incompatible materials : Heat sources.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)	
Remark	End of shift (As soon as possible after exposure ceases)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL TWA [2]	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [2]	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	

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ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits	
Remark (NIOSH)	Potential for dermal absorption.	
100% METHANOL UNLABELED (67-56-1)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)	
Remark	End of shift (As soon as possible after exposure ceases)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL TWA [2]	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [2]	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits	
Remark (NIOSH)	Potential for dermal absorption.	

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ACRYLAMIDE UNLABELED (79-06-1)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	0.03 mg/m³ Central Nervous System impairment. Confirmed animal carcinogen with unknown relevance to humans. Danger of cutaneous absorption.	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	0.3 mg/m³ Skin designation.	
Remark (OSHA)	PEL 0.03 mg/m3 California permissible exposure limits for chemical contaminants. Skin.	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	0.03 mg/m³ Potential Occupational Carcinogen. Potential for dermal absorption.	

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.

#### Materials for protective clothing:

Wear suitable protective clothing and gloves

#### Hand protection:

Wear suitable protective clothing and gloves

#### Eye protection:

Wear eye protection. Chemical goggles or face shield with safety glasses

#### Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator

#### Personal protective equipment symbol(s):









## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : Colorless
Odor : Pungent

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Odor threshold : No data available pH : No data available Melting point : -98 °C (-144 °F) Freezing point : No data available Boiling point : 64.7 °C (148.5 °F)

Flash point : 9.7 °C (49.5 °F) - closed cup

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available

Vapor pressure : 130.3 hPa (97.7 mmHg) at 20 °C (68 °F); 169.27 hPa (126.96 mmHg) at 25 °C (77 °F)

Vapor pressure at 50°C : 546.6 hPa (410 mmHg) at 50 °C (122 °F)

Relative vapor density at 20°C : 1.11

Relative density : No data available

Density : 0.791 g/ml at 25 °C (77 °F)

Molecular mass : 32.04 g/mol Solubility : No data available

Partition coefficient n-octanol/water (Log Pow) : -0.77

Auto-ignition temperature : 455 °C (851 °F) at 1,013 hPa (760 mmHg)

Explosive properties : Product is not explosive.

Oxidizing properties : Non oxidizing material according to EC criteria.

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapors may form flammable mixture with air. Highly flammable liquid and vapor.

#### 10.2. Chemical stability

See storage and expiration date on CoA.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Acid anhydrides. Acid chlorides. Oxidizing agent. Alkali Metal Amides. Reducing agents. Acids.

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

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## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Toxic if swallowed.

Acute toxicity (dermal) : Toxic in contact with skin.

Acute toxicity (inhalation) : Toxic if inhaled.

Acute toxicity (illinalation)	Toxic ii iiinaica.	
ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	
ATE US (vapors)	3 mg/l/4h	
Additional data	LDLO, oral, human: 143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
100% METHANOL UNLABELED (67-56-1)		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	
ATE US (vapors)	3 mg/l/4h	
ATE US (dust, mist)	128.2 mg/l/4h	
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
ACRYLAMIDE UNLABELED (79-06-1)		
LD50 oral rat	177 mg/kg	
LD50 dermal rabbit	1141 mg/kg	
LC50 Inhalation - Rat	> 1500 mg/m³ 4 h	
ATE US (oral)	124 mg/kg body weight	
ATE US (dermal)	1100 mg/kg body weight	
ATE US (gases)	4500 ppmV/4h	
ATE US (vapors)	11 mg/l/4h	
ATE US (dust, mist)	1.5 mg/l/4h	

Skin corrosion/irritation : Causes skin irritation.

ACRYLAMIDE UNLABELED (79-06-1)	
рН	5.2 – 6 at 500 g/l

Serious eye damage/irritation : Causes serious eye irritation.

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ACRYLAMIDE UNLABELED (79-06-1)	
рН	5.2 – 6 at 500 g/l
Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity	<ul><li>: Not classified</li><li>: Not classified</li><li>: May cause cancer (Dermal, Inhalation, oral).</li></ul>
100% METHANOL UNLABELED (67-56-1)	
National Toxicology Program (NTP) Status	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.
ACRYLAMIDE UNLABELED (79-06-1)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
Reproductive toxicity STOT-single exposure	<ul> <li>blood, brain, liver (Dermal, Inhalation, oral).</li> <li>Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).</li> </ul>
100% METHANOL UNLABELED (67-56-1)	
STOT-single exposure	Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).
STOT-repeated exposure	: Not classified
ACRYLAMIDE UNLABELED (79-06-1)	
STOT-repeated exposure	Causes damage to organs (peripheral nervous system) through prolonged or repeated exposure (Dermal, Inhalation, oral).
Aspiration hazard Viscosity, kinematic Potential Adverse human health effects and	<ul> <li>Not classified</li> <li>No data available</li> <li>This information is based on our current knowledge and is intended to describe the product for</li> </ul>
symptoms	the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach.
Symptoms/effects	: May cause cancer (in contact with skin, if inhaled, if swallowed). May cause damage to organs (Eyes, heart, kidneys, liver, central nervous system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Toxic if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL	
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h

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ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
EC50 - Crustacea [2]	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	
100% METHANOL UNLABELED (67-56-1)		
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 - Crustacea [2]	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	
ACRYLAMIDE UNLABELED (79-06-1)		
LC50 - Fish [1]	90 mg/l Pimephales promelas (fathead minnow) - 96 h	
EC50 - Crustacea [1]	160 mg/l Daphnia magna (Water flea) - 48 h	
NOEC (acute)	60 mg/l Daphnia magna (Water flea) - 48 h mortality NOEC	
NOEC (chronic)	5 mg/l Cyprinus carpio (Carp) 28 d	

## 12.2. Persistence and degradability

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL	
Biochemical oxygen demand (BOD)	600 – 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d
100% METHANOL UNLABELED (67-56-1)	
Biochemical oxygen demand (BOD)	600 – 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d
ACRYLAMIDE UNLABELED (79-06-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 %

## 12.3. Bioaccumulative potential

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL	
BCF - Fish [1]	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Partition coefficient n-octanol/water (Log Pow)	-0.77
100% METHANOL UNLABELED (67-56-1)	
BCF - Fish [1]	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1

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100% METHANOL UNLABELED (67-56-1)		
Partition coefficient n-octanol/water (Log Pow) -0.77		
ACRYLAMIDE UNLABELED (79-06-1)		
BCF - Fish [1] 72 ug/l - Oncorhynchus mykiss (Rainbow trout) - 72 h		
Bioconcentration factor (BCF REACH) 1.65		
Partition coefficient n-octanol/water (Log Pow)	-0.67	

#### 12.4. Mobility in soil

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
Ecology - soil Not degradable in the soil.		
100% METHANOL UNLABELED (67-56-1)		
Ecology - soil Not degradable in the soil.		
ACRYLAMIDE UNLABELED (79-06-1)		
Ecology - soil	Not available.	

#### 12.5. Other adverse effects

Other adverse effects : Avoid release to the environment.

Other information : Stability in water: at 19 °C - (83 - 91%) - 72 h. Remarks: Hydrolyses on contact with water.

Hydrolyses readily.

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local

environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

#### **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

#### 14.1. UN number

DOT NA No : UN1230 UN-No. (TDG) : UN1230 UN-No. (IMDG) : 1230 UN-No. (IATA) : 1230

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol
Proper Shipping Name (TDG) : METHANOL
Proper Shipping Name (IMDG) : METHANOL
Proper Shipping Name (IATA) : Methanol

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#### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 3 (6.1) Hazard labels (DOT) : 3, 6.1



#### **TDG**

Transport hazard class(es) (TDG) : 3 (6.1) Hazard labels (TDG) : 3, 6.1



#### **IMDG**

Transport hazard class(es) (IMDG) : 3 (6.1) Hazard labels (IMDG) : 3, 6.1



#### IATA

Transport hazard class(es) (IATA) : 3 (6.1) Hazard labels (IATA) : 3, 6.1



#### 14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

#### DOT

UN-No.(DOT) : UN1230

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DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110

kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59

F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 1 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

**TDG** 

UN-No. (TDG) : UN1230

TDG Special Provisions : 43 - Despite section 2.1 of Part 2 (Classification), these dangerous goods are assigned to this

classification based on human experience.

Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 1 L

Carrying Railway Vehicle Index

Emergency Response Guide (ERG) Number : 131

**IMDG** 

Special provision (IMDG) : 279
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Flash point (IMDG) : 12°C c.c.

Properties and observations (IMDG) : Colourless, volatile liquid. Flashpoint: 12°C c.c. Explosive limits: 6% to 36.5% Miscible with

water. Toxic if swallowed; may cause blindness. Avoid skin contact.

MFAG-No : 131

**IATA** 

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L

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PCA packing instructions (IATA) : 352
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A113
ERG code (IATA) : 3L

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL			
CERCLA RQ 5000 lb			
SARA Section 302 Threshold Planning Quantity (TPQ)  Not subject to reporting requirements of the United States SARA Section 302.			
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard		

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
100% METHANOL UNLABELED	67-56-1	Present	Active	
ACRYLAMIDE UNLABELED	79-06-1	Present	Active	

100% METHANOL UNLABELED (67-56-1)	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

ACRYLAMIDE UNLABELED (79-06-1)			
Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)			
CERCLA RQ 5000 lb			
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb		
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb 1,000lb if the substance is solid in powder form with particle size less than 100 microns, or is in solution or molten form		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard		

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#### 15.2. International regulations

#### **CANADA**

#### ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL

Listed on the Canadian DSL (Domestic Substances List)

#### **100% METHANOL UNLABELED (67-56-1)**

Listed on the Canadian DSL (Domestic Substances List)

#### **ACRYLAMIDE UNLABELED (79-06-1)**

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### **National regulations**

#### **ACRYLAMIDE UNLABELED (79-06-1)**

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

## 15.3. US State regulations

ACRYLAMIDE (+100 PPM HYDROQUINONE) UNLABELED 1 MG/ML IN METHANOL		
U.S California - Proposition 65 - Carcinogens List No		
U.S California - Proposition 65 - Developmental Toxicity	Yes	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

100% METHANOL UNLABELED (67-56-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		

ACRYLAMIDE UNLAB	ELED (79-06-1)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)

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ACRYLAMIDE UNLABELED (79-06-1)					
Yes	Yes	No	Yes	0.2 μg/day	140 μg/day

Component	State or local regulations
100% METHANOL UNLABELED(67-56-1)	U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List; U.S New Jersey - Right to Know Hazardous Substance List
ACRYLAMIDE UNLABELED(79-06-1)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

#### **SECTION 16: Other information**

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Revision date : 09/20/2023

Other information : This product is not radioactive. The data given for this product are those of the corresponding

unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the

corresponding unlabeled compound.

Full text of F	Full text of H-phrases		
H225	Highly flammable liquid and vapor		
H301	Toxic if swallowed		
H311	Toxic in contact with skin		
H312	Harmful in contact with skin		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H319	Causes serious eye irritation		
H331	Toxic if inhaled		
H332	Harmful if inhaled		
H340	May cause genetic defects		
H350	May cause cancer		
H361	Suspected of damaging fertility or the unborn child		
H370	Causes damage to organs		
H372	Causes damage to organs through prolonged or repeated exposure		
H402	Harmful to aquatic life		

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.