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According to regulation (EC) No. 1272/2008	Product Name: Acrylamide		Product Code: A11260

## **SECTION 1 - CHEMICAL IDENTIFICATION**

PRODUCT NAME: Acrylamide  
 CATALOG #: A11260  
 SUPPLIER'S NAME: Melford Laboratories Ltd  
 SUPPLIERS ADDRESS: Bildeston Road, Chelsworth, Ipswich, IP7 7LE, UK  
 EMERGENCY CONTACT: 01449 741178  
 OTHER INFORMATION: support@melford.co.uk

## **SECTION 2 - HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

#### **GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

H301	Acute toxicity, oral	Category 3
H312	Acute toxicity, dermal	Category 4
H315	Skin corrosion/irritation	Category 2
H317	Skin Sensitisation	Category 1
H319	Serious eye damage/eye irritation	Category 2
H332	Acute toxicity, inhalation	Category 4
H340	Germ cell mutagenicity	Category 1
H350	Carcinogenicity	Category 1
H361	Reproductive toxicity	Category 2
H372	Specific target organ toxicity, repeated exposure	Category 1
H402	Acute aquatic toxicity	Category 3

### **2.2 GHS Label elements, including Hazard and Precautionary Statement(s)**

#### **Pictogram**



**Signal word: Danger**

#### **Hazard statement(s)**

H301	Toxic if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation

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H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life

**Prevention, Response, Storage and Disposal Precautionary Statement(s)**

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/vapors/spray.
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see. on this label).
P330	Rinse mouth.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

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### **SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

CAS Number: 79-06-1  
 EINECS Number: 201-173-7  
 Formula: C<sub>3</sub>H<sub>5</sub>NO  
 Molecular Weight: 71.1 g/mol

### **SECTION 4 - FIRST-AID MEASURES**

#### **4.1 Description of first aid measures**

**General advice:** Consult a doctor and show this safety data sheet.

- i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
- ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
- iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
- iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

**4.2 Most important symptoms and effects, both acute and delayed:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**4.3 Indication of immediate medical attention and special treatment needed:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

### **SECTION 5 - FIRE FIGHTING MEASURES**

#### **5.1 Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**5.2 Special hazards arising from the substance or mixture:** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>).

**5.3 Precautions for fire-fighters:** Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

**5.4 Further information:** No data available

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:** Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

**6.2 Environmental precautions:** Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up:** Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

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**6.4 Reference to other sections:** For required PPE see section 8. For disposal see section 13.

### **SECTION 7 - HANDLING AND STORAGE**

**7.1 Precautions for safe handling:** Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Store at room temperature.

**7.3 Specific end use(s):** Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

### **SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control parameters**

##### **Components with workplace control parameters:**

Component	Acrylamide	Acrylamide	Acrylamide
CAS#	79-06-1	79-06-1	79-06-1
Value	TWA	TWA	TWA
Control Parameters	0.300000 mg/m3	0.300000 mg/m3	0.300000 mg/m3
Basis	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants Remarks Skin designation	USA. NIOSH Recommended Exposure Limits Potential Occupational Carcinogen See Appendix A Potential for dermal absorption	USA. ACGIH Threshold Limit Values (TLV) Central Nervous System impairment Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption

- ❖ **ACGIH:** American Conference of Governmental Industrial Hygienists.
- ❖ **OSHA:** Occupational Safety and Health Administration.
- ❖ **NIOSH IDLH:** The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health.

#### **8.2 Exposure Controls**

- i. **Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

#### **8.3 Personal protective equipment**

- i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
- iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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- iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- v. **Control of environmental exposure:** Do not let product enter drains

### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Appearance</b>	Powder	<b>Vapor Pressure</b>	No Data Available
<b>Odor</b>	No Data Available	<b>Vapor Density</b>	2.45 - (Air = 1.0)
<b>Odor Threshold</b>	No Data Available	<b>Relative Density</b>	No Data Available
<b>pH</b>	5.2 - 6 at 500 g/l	<b>Water Solubility</b>	200 g/l at 20 °C
<b>Melting / Freezing Point</b>	82 - 86 °C	<b>Partition Coefficient</b>	No Data Available
<b>Initial Boiling Point Range</b>	125 °C	<b>Auto-Ignition Temperature</b>	No Data Available
<b>Flash Point</b>	138 °C	<b>Decomposition Temperature</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available	<b>Viscosity</b>	No Data Available
<b>Flammability (Solid, Gas)</b>	No Data Available	<b>Explosive Properties</b>	No Data Available
<b>Upper / Lower Flammability or Explosive Limits</b>	No Data Available	<b>Oxidizing Properties</b>	No Data Available

### **SECTION 10 - STABILITY AND REACTIVITY**

**Stability:** Stable under recommended storage conditions.  
**Hazardous Decomposition Products:** No Data Available.  
**Hazardous Polymerization:** No Data Available.  
**Incompatibilities:** No Data Available.

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

#### **Acute Toxicity**

Component	LD50 Oral	LD50Dermal	LC50 inhalation
Acrylamide	177 mg/kg (Rat)	1,141 mg/kg (Rabbit)	> 1,500 mg/m (Rat) 4 h

**Carcinogenicity:** Possible cancer hazard. May cause cancer based on animal data

Component	CAS#	IARC	NTP	ACGIH	OSHA	Mexico
Acrylamide	79-06-1	Group 2A	Reasonably Anticipated	A3	Listed	A3

**Mutagenic Effects:** May cause heritable genetic damage  
**Reproductive Effects:** Category 2: Substances which should be regarded as if they impair fertility in humans.  
**STOT - single exposure:** Central nervous system (CNS)

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### **SECTION 12 - ECOLOGICAL INFORMATION**

**Eco Toxicity:** Do not empty into drains.

Component	Freshwater Fish	Water Flea
Acrylamide	124 mg/L LC50 96 h 74-150 mg/L LC50 96 h 81-150 mg/L LC50 96 h 103-115 mg/L LC50 96 h 137-191 mg/L LC50 96 h	98 mg/L EC50 = 48 h

#### **Mobility**

Component	log Pow
Acrylamide	-1.24

**Persistence and degradability/ Bioaccumulative potential:** No data available

**Results of PBT and vPvB assessment:** No data available

**Other adverse effects:** No data available

**Chronic Toxicity:** There are no known carcinogenic chemicals in this product

### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Component	CAS#	RCRA - U Series Wastes
Acrylamide	79-06-1	U007

### **SECTION 14 - TRANSPORT INFORMATION**

	UN#	Proper Shipping Name	Hazard Class	Packaging Group
<b>DOT</b>	2074	ACRYLAMIDE, SOLID, MIXTURE	6.1	III
<b>TDG</b>	2074	ACRYLAMIDE, SOLID, MIXTURE	6.1	III
<b>IATA</b>	2074	ACRYLAMIDE, SOLID, MIXTURE	6.1	III
<b>IMDG/IMO</b>	2074	ACRYLAMIDE, SOLID, MIXTURE	6.1	III

### **SECTION 15 - REGULATORY INFORMATION**

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**INTERNATIONAL INVENTORIES**

TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	Listed	Listed	Listed	Listed

**USA FEDERAL REGULATION**

**SARA 311/312 HAZARDOUS CATEGORIZATION**

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release Of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

**SARA 313**

Component	CAS#	Weight%	SARA 313 – Threshold Values %
Acrylamide	79-06-1	90-99	0.1

**Clean Water Act:** Not Applicable  
**OSHA /TSCA 12(b):** Not Applicable

**Clean Air Act**

Component	CAS#	HAPS Data
Acrylamide	79-06-1	Listed

**California Proposition 65:** This product contains Proposition 65 chemicals.

Component	CAS#	California Prop. 65	Prop 65 NSRL	Category
Acrylamide	79-06-1	Carcinogen Developmental Male Reproductive	0.2 µg/day	Developmental Carcinogen

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
Acrylamide	5000 lb	5000 lb

**HMIS RATING**

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
2	*	1	0

**NFPA RATING**

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<b>Health hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>
2	1	0

**STATE RIGHT TO KNOW**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acrylamide	Listed	Listed	Listed	Listed	Listed

**US DEPARTMENT OF TRANSPORTATION**

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
No	No	No

**U.S. DEPARTMENT OF HOMELAND SECURITY:** This product does not contain any DHS chemicals.

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**This SDS complies with the requirements of Regulation (EC).**

**SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Melford Laboratories Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.