# Safety Data Sheet



Issuing Date 07-May-2009

Revision Date 31-Mar-2011

**Revision Number** 7

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name	Acrylamide
Product Code(s)	0341
Recommended Use	For Further Manufacturing Use Only Not for Human or Animal Drug Use
Recommended Use	Gel Electrophoresis
Synonyms <u>Company</u> AMRESCO, LLC 6681 Cochran Road Solon, Ohio 44139	ACRYLAMIDE (ACGIH:DOT:OSHA) * ACRYLIC AMIDE * AKRYLAMID (CZECH) *AMID KYSELINY AKRYLOVE (CZECH) * ETHYLENECARBOXAMIDE * PROPENAMIDE * 2-PROPENAMIDE (9CI) * PROPENOIC ACID AMIDE * RCRA WASTE NUMBER U007 * UN2074 (DOT) * VINYL AMIDE *
Emergency Telephone Number	Chemtrec 1-800-424-9300
Company Phone Number E-mail Address	1-800-448-4442 info@amresco-inc.com

# 2. HAZARDS IDENTIFICATION

# **GHS - Classification**

ClassificationCarcinogen 1B Skin Irritant 2 Skin Sensitizer 1 Specific Target Organ Toxicity<br/>(Repeated) 4 Toxic to Reproduction 2 Mutagen 1B Acute Toxicity 3 Acute Toxicity<br/>4 Eye Irritant 2Signal WordDangerCoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)CoordinationCoordination<br/>(Coordination)Coordination

Hazard Statements	H301 - Toxic if swallowed H311 - Toxic in contact with skin H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H332 - Harmful if inhaled H340 - May cause genetic defects if inhaled H350 - May cause cancer by inhalation H361 - Suspected of damaging fertility or the unborn child if inhaled H402 - Harmful to aquatic life
Precautionary Statements	P280 - Wear protective gloves/protective clothing/eye protection/face protection 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 attention/advice P301 - IF SWALLOWED P310 - Immediately call a POISON CENTRE or doctor/physician

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Acrylamide	EEC No. 201-173-7	Not available	79-06-1	95-100	Carc.Cat.2;R45 Muta.Cat.2;R46 Repr.Cat.3;R62 T;R25-48/23/24/25 Xn;R20/21 Xi;R36/38 R43

# 4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
Skin Contact	Wash off immediately with plenty of water.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person.
Notes to Physician	Treat symptomatically

# 5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable
Flash Point	Not determined
Suitable Extinguishing Media	Dry chemical, CO2, appropriate foam.
Hazardous Combustion Products	Carbon oxides, Ammonia.
Explosion Data Sensitivity to Mechanical Impact Sensitivity to Static Discharge	Not sensitive Not sensitive

### Specific Hazards Arising from the Chemical

Use water spray to cool fire-exposed containers.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

 Personal Precautions
 Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation

 Methods for Containment
 Prevent further leakage or spillage if safe to do so

Methods for Cleaning UpAvoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area<br/>and wash spill site after material pickup is complete.

### 7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.		
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic.		
Incompatible Products	Iron and Iron salts. Oxidizing agents. Copper. Free radical initiators. Brass.		

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH		
Acrylamide	TWA: 0.03 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup>	IDLH: 60 mg/m <sup>3</sup>		
79-06-1		(vacated) TWA: 0.03 mg/m <sup>3</sup>	TWA: 0.03 mg/m <sup>3</sup>		
		Skin			
Engineering Measures	Showers				
	Evewash stations				
	Ventilation systems				
	Ventilation Systems				
Personal Protective Equipment					
Eye/Face Protection	Safety glasses with sid	le-shields.			
Skin and Body Protection	Wear protective gloves/clothing.				
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations				
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice				

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Incompatible Products	Iron and Iron salts. Oxidizing agents. Copper. Free radical initiators. Brass.
Conditions to Avoid	Protect from moisture. Hygroscopic. Avoid contact with acids. Heating over 90 C.
Hazardous Decomposition Products	s Carbon oxides. Ammonia.
Hazardous Polymerization	Hazardous polymerization may occur.

# 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information** 

Causes skin, eye and respiratory tract irritation. Very toxic by inhalation, in contact with skin, or if swallowed.

	Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Γ	Acrylamide	124 mg/kg (Rat)	1680 µL/kg (Rabbit)	
	-		400 mg/kg (Rat)	

### **Chronic Toxicity**

**Chronic Toxicity** 

Suspected carcinogen. Suspected teratogen. Possible risk of impaired fertiliy.

Chemical Name	ACGIH	IARC	NTP	OSHA
Acrylamide	A3	Group 2A	Reasonably Anticipated	Х

Teratogenic

May cause congenital malformation in the fetus

Target Organ Effects

Nerves, Kidneys.

# 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Acrylamide		LC50= 109 mg/L Pimephales promelas 96 h LC50= 120 mg/L Brachydanio rerio 96 h LC50= 124 mg/L Pimephales promelas 96 h LC50= 162 mg/L Oncorhynchus mykiss 96 h LC50= 85 mg/L Lepomis macrochirus 96 h		EC50 = 98 mg/L 48 h

Chemical Name	Log Pow
Acrylamide	= -1.24

### 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations

Contaminated Packaging

Dispose of in accordance with all federal, state and local regulations

# 14. TRANSPORT INFORMATION

<u>IATA</u>	UN-No Proper Shipping Name Hazard Class Packing Group	Regulated 2074 ACRYLAMIDE, SOLID 6.1 III
DOT	Proper Shipping Name Hazard Class UN-No Packing Group	Regulated ACRYLAMIDE, SOLID 6.1 2074 III

# 15. REGULATORY INFORMATION

## **REACH Title VII Restrictions**

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
Acrylamide	>=>=0.1 % weight	Not applicable	X	Not applicable	2	Deleterious

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Acrylamide 79-06-1 ( 95-100 )	Not applicable	Not applicable	97-1-171, 0.1 % or more in mixtures	Not applicable	>= 0.1 %

# International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### **U.S. Federal Regulations**

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Acrylamide	79-06-1	95-100	0.1

SARA 311/312 Hazard Categories	
Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:.

Che	mical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
A	crylamide	79-06-1	95-100	Present	Group I		

### CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Acrylamide	5000 lb	5000 lb

### U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
Acrylamide	79-06-1	Carcinogen

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acrylamide	Х	Х	Х	Х	Х

### International Regulations

#### Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Acrylamide	A3	Mexico: TWA= 0.03 mg/m <sup>3</sup>
		Mexico: STEL= 0.06 mg/m <sup>3</sup>

Canada

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

### WHMIS Hazard Class

D1B Toxic materials D2A Very toxic materials D2B Toxic materials



Chemical Name	NPRI
Acrylamide	Х

# 16. OTHER INFORMATION

Issuing Date	07-May-2009
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Revision Date 31-Mar-2011

### Revision Note

No information available.

### **Recommended Restrictions** No information available

#### Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

### End of MSDS