



Issuing Date 15-Oct-2009

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Revision Number 2

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

Product Name Acryl/Bis 37.5:1 Solution
Product Code(s) 0254
Recommended Use For Further Manufacturing Use Only
Not for Human or Animal Drug Use
Recommended Use Liquid acrylamide used in electrophoresis

Company
AMRESKO, LLC
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Solon, Ohio 44139

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2. HAZARDS IDENTIFICATION

GHS - Classification

Classification Carcinogen 1B Germ Cell Mutagenicity 1B Toxic to Reproduction 2 Acute Toxicity Oral 3 Specific Target Organ Toxicity (repeated) 1 Acute Toxicity Inhalation 4 Skin Irritant 2 Eye Irritant 2 Skin Sensitizer 1

Signal Word Danger



Hazard Statements H301 - Toxic if swallowed H332 - Harmful if inhaled H312 - Harmful in contact with skin H315 - Causes skin irritation H319 - Causes serious eye irritation H317 - May cause an allergic skin reaction H350 - May cause cancer H340 - May cause genetic defects H361 - Suspected of damaging fertility or the unborn child H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

P301+ P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician P308 + P313 - IF exposed or concerned: Get medical attention/advice P280 - Wear protective gloves/protective clothing/eye protection/face protection 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

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	35-39	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
Methylene diacrylamide	EEC No. 203-750-9	Not available	110-26-9	0-2	-

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 soap and plenty of water removing all contaminated clothes and shoes

Inhalation Move to fresh air. If breathing becomes difficult, give oxygen

Ingestion Clean mouth with water and afterwards drink plenty of water

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable

Flash Point Not determined

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx), Ammonia.

Explosion Data

Sensitivity to Mechanical Impact Not sensitive

Sensitivity to Static Discharge Not sensitive

Specific Hazards Arising from the Chemical
Containers may explode when heated.

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 Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice. Protect from air. Protect from light.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from air. Protect from light.

Incompatible Products Strong oxidizing agents. Iron and Iron salts. Copper. Free radical initiators. Brass.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acrylamide 79-06-1	TWA: 0.03 mg/m ³	TWA: 0.3 mg/m ³ (vacated) TWA: 0.03 mg/m ³ Skin	IDLH: 60 mg/m ³ TWA: 0.03 mg/m ³
Methylene diacrylamide 110-26-9			

Engineering Measures Showers
 Eyewash stations
 Ventilation systems

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles

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

Appearance	Clear Colorless	
Odor	No information available	
Odor Threshold	No information available	
Decomposition Temperature °C	No information available	
Freezing Point	No information available	
Initial Boiling Point	No information available	
Physical State	Solution	
pH	No data available	
Flash Point	Not determined	
Autoignition Temperature	No data available	
Boiling Point/Range	No data available	
Melting Point/Range	No data available	
Flammability Limits in Air	Upper No data available	Lower No data available
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Evaporation Rate	No data available	
MMHG @ 37.8 C	No data available	
Vapor Density	No data available	
Specific Gravity	No data available	
Solubility	No information available	
Partition Coefficient (n-octanol/water)	No data available	
Viscosity	No information available	

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Incompatible Products	Strong oxidizing agents. Iron and Iron salts. Copper. Free radical initiators. Brass.
Conditions to Avoid	Protect from heat and direct sunlight.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx). Ammonia.
Hazardous Polymerization	Hazardous polymerization may occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Irritating to eye, skin and respiratory system. Toxic by inhalation and if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acrylamide	124 mg/kg (Rat)	1680 µL/kg (Rabbit) 400 mg/kg (Rat)	
Methylene diacrylamide	390 mg/kg (Rat)		

Chronic Toxicity

Chronic Toxicity Suspected carcinogen. Suspected mutagen.

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

Target Organ Effects Kidneys, Nerves.

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

IATA

UN-No 2810
Proper Shipping Name Toxic Liquid Organic N.O.S. (Containing Acrylamide)
Hazard Class 6.1
Packing Group III

DOT

Proper Shipping Name Toxic Liquid Organic N.O.S. (Containing Acrylamide)
Hazard Class 6.1
UN-No 2810
Packing Group III

15. REGULATORY INFORMATION

REACH Title VII Restrictions No information available.

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
Methylene diacrylamide	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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 (35-39)	Not applicable	Not applicable	97-1-171, 0.1 % or more in mixtures	Not applicable	>= 0.1 %
Methylene diacrylamide 110-26-9 (0-2)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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	35-39	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:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acrylamide	79-06-1	35-39	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

U.S. State Right-to-Know Regulations

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

International Regulations

Mexico - Grade

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

Canada

WHMIS Hazard Class

- D1B Toxic materials
- D2A Very toxic materials
- D2B Toxic materials



Chemical Name	NPRI
Acrylamide	X

16. OTHER INFORMATION

Issuing Date 15-Oct-2009

Revision Date 08-Jul-2011

Revision Note
No information available.

Recommended Restrictions No information available

Disclaimer

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End of MSDS