

## SAFETY DATA SHEET

Revision Date 18-Jan-2018

Revision Number 4

### 1. Identification

**Product Name** Acrylamide : Bis-Acrylamide 37.5:1 (40% Solution/Electrophoresis)  
**Cat No. :** BP1410-1  
**Synonyms** No information available  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

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

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Central nervous system (CNS), Peripheral Nervous System (PNS), Reproductive System.	

#### **Label Elements**

##### **Signal Word**

Danger

##### **Hazard Statements**

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause genetic defects  
May cause cancer

Suspected of damaging fertility  
Causes damage to organs through prolonged or repeated exposure



### Precautionary Statements

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Contaminated work clothing should not be allowed out of the workplace  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF exposed or concerned: Get medical attention/advice

#### Skin

IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash before reuse  
If skin irritation or rash occurs: Get medical advice/attention

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

#### Storage

Store locked up

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

**WARNING.** Cancer and Reproductive Harm - <https://www.p65warnings.ca.gov/>.

## 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	60
Acrylamide	79-06-1	39
Methylene diacrylamide	110-26-9	1

## 4. First-aid measures

### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

### Eye Contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Most important symptoms and effects</b>	May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

### Hazardous Combustion Products

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Ammonia

### 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. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
3	1	0	N/A

## 6. Accidental release measures

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
<b>Environmental Precautions</b>	Should not be released into the environment. Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment and Clean Up</b>	Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

## 7. Handling and storage

<b>Handling</b>	Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not ingest.
<b>Storage</b>	Keep in a dry place. Keep container tightly closed. Keep away from direct sunlight. Store under an inert atmosphere. To maintain product quality: Keep refrigerated.

## 8. Exposure controls / personal protection

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Acrylamide	TWA: 0.03 mg/m <sup>3</sup> Skin	(Vacated) TWA: 0.03 mg/m <sup>3</sup> Skin TWA: 0.3 mg/m <sup>3</sup>	IDLH: 60 mg/m <sup>3</sup> TWA: 0.03 mg/m <sup>3</sup>	TWA: 0.03 mg/m <sup>3</sup> STEL: 0.06 mg/m <sup>3</sup>

### Legend

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

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

#### Eye/face 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.

#### Skin and body protection

Long sleeved clothing.

#### 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 EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

## 10. Stability and reactivity

### Reactive Hazard

None known, based on information available

<b>Stability</b>	Air sensitive. Light sensitive.
<b>Conditions to Avoid</b>	Exposure to air. Exposure to light. Incompatible products.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NO <sub>x</sub> ), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Ammonia
<b>Hazardous Polymerization</b>	No information available.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information

<b>Oral LD50</b>	Category 4. ATE = 300 - 2000 mg/kg.
<b>Dermal LD50</b>	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
<b>Vapor LC50</b>	Based on ATE data, the classification criteria are not met.

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Acrylamide	124 mg/kg ( Rat )	1141 mg/kg ( Rabbit)	Not listed
Methylene diacrylamide	390 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Irritation</b>	Irritating to eyes and skin
<b>Sensitization</b>	May cause sensitization by skin contact
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. Possible cancer hazard. May cause cancer based on animal data.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Acrylamide	79-06-1	Group 2A	Reasonably Anticipated	A3	X	A3
Methylene diacrylamide	110-26-9	Not listed	Not listed	Not listed	Not listed	Not listed

*IARC: (International Agency for Research on Cancer)*

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*Group 1 - Carcinogenic to Humans*

*Group 2A - Probably Carcinogenic to Humans*

*Group 2B - Possibly Carcinogenic to Humans*

*NTP: (National Toxicity Program)*

*Known - Known Carcinogen*

*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

*A1 - Known Human Carcinogen*

*A2 - Suspected Human Carcinogen*

*A3 - Animal Carcinogen*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*Mexico - Occupational Exposure Limits - Carcinogens*

*Mexico - Occupational Exposure Limits - Carcinogens*

*A1 - Confirmed Human Carcinogen*

*A2 - Suspected Human Carcinogen*

*A3 - Confirmed Animal Carcinogen*

*A4 - Not Classifiable as a Human Carcinogen*

*A5 - Not Suspected as a Human Carcinogen*

<b>Mutagenic Effects</b>	Mutagenic
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<b>Reproductive Effects</b>	Experiments have shown reproductive toxicity effects on laboratory animals.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	None known
<b>STOT - repeated exposure</b>	Central nervous system (CNS) Peripheral Nervous System (PNS) Reproductive System
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects,both acute and delayed</b>	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Do not empty into drains. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Acrylamide	Not listed	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	Not listed	EC50: = 98 mg/L, 48h Flow through (Daphnia magna) EC50: = 98 mg/L, 48h (Daphnia magna)

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility**

Component	log Pow
Acrylamide	-1.24
Methylene diacrylamide	-1.52

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Acrylamide - 79-06-1	U007	-

## 14. Transport information

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

## 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Acrylamide	X	X	-	201-173-7	-		X	X	X	X	X
Methylene diacrylamide	X	X	-	203-750-9	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

TSCA 12(b) Not applicable

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Acrylamide	79-06-1	39	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acrylamide	X		-

OSHA Occupational Safety and Health Administration

Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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

California Proposition 65 This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Acrylamide	79-06-1	Carcinogen Developmental Male Reproductive	0.2 µg/day	Developmental Carcinogen

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Acrylamide	X	X	X	X	X

**U.S. Department of Transportation**

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Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**16. Other information**

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Revision Date** 18-Jan-2018

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**