OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
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Oxford
Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

ACRYLAMIDE 40% SOLUTION IN WATER

MSDS CAS:

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product
Product Name: Acrylamide 40% solution in water
CAS#:
Chemical Name: Not applicable.
Chemical Formula: Not applicable.

Brand : OXFORD

Details Of The Supplier Of The Safety Data Sheet :

Company identification: **OXFORD LAB FINE CHEM LLP**
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
Mumbai, Maharashtra, INDIA.
Tel: 91-250-2390989
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Acrylamide	79-06-1	40-50 %
{N,N'-}methylenebisacrylamide	110-26-9	<10
Water	7732-18-5	40-60

Toxicological Data on Ingredients: Acrylamide: ORAL (LD50): Acute: 124 mg/kg [Rat.]. 107 mg/kg [Mouse]. 150 mg/kg [Rabbit]. DERMAL (LD50): Acute: 400 mg/kg [Rat]. 1680 mg/kg [Rabbit]. N,N'-methylenebisacrylamide: ORAL (LD50): Acute: 390 mg/kg [Rat]. 380 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (permeator), of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA+ (Proven.) by NIOSH [Acrylamide]. Classified A3 (Proven for animal.) by ACGIH [Acrylamide]. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP, 2 (Suspected for human.) by European Union [Acrylamide]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Acrylamide]. Mutagenic for bacteria and/or yeast. [Acrylamide]. Mutagenic for bacteria and/or yeast. [N,N'-methylenebisacrylamide].
TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/male [POSSIBLE] [Acrylamide]. The substance may be toxic to the nervous system, peripheral nervous system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Serious Ingestion: Not available.

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Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not available.
Flammable Limits: Not available.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not available.
Explosion Hazards in Presence of Various Substances: Slightly explosive in presence of open flames and sparks, of heat. Non-explosive in presence of shocks.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Material in powder form, capable of creating a dust explosion. (Acrylamide).

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Poisonous liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F). A refrigerated room would be preferable.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Acrylamide TWA: 0.03 (mg/m3) [Australia] Inhalation TWA: 0.3 (mg/m3) from OSHA (PEL) [United States] Inhalation TWA: 0.03 (mg/m3) from NIOSH Inhalation TWA: 0.03 (mg/m3) from NIOSH SKIN TWA: 0.3 (mg/m3) [United Kingdom (UK)]Inhalation TWA: 0.03 (mg/m3) from ACGIH (TLV) [United States] [1999] InhalationConsult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance	**: Liquid.**
Odor	**: Not available.**
Taste	**: Not available.**
Molecular Weight	**: Not available.**
Color	**: Not available.**
pH (1% soln/water)	**: Not available.**
Boiling Point	**: The lowest known value is 100°C (212°F) (Water).**
Melting Point	**: Not available.**
Critical Temperature	**: Not available.**
Specific Gravity	**: Weighted average: 1.07 (Water = 1)**
Vapor Pressure	**: The highest known value is 2.3 kPa (@ 20°C) (Water).**
Vapor Density	**: The highest known value is 0.62 (Air = 1) (Water).**
Volatility	**: Not available.**

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Section 9: Physical and Chemical Properties (Continued)

Odor Threshold : Not available.
Water/Oil Dist. Coeff. : Not available.
Ionicity (in Water) : Not available.
Dispersion Properties : See solubility in water, methanol, acetone.
Solubility : Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone.

Section 10: Stability and Reactivity Data

Stability : The product is stable.
Instability Temperature : Not available.
Conditions of Instability : Incompatible materials
Incompatibility with various substances : Reactive with oxidizing agents, acids, alkalis
Corrosivity : Non-corrosive in presence of glass.
Special Remarks on Reactivity : Light Sensitive. May polymerize on exposure to light. The solid is stable at room temperature but may polymerize violently on melting or when heated above 50 C. Reacts spontaneously with hydroxyl-, amino-, and sulfhydryl- containing compounds. Reacts vigorously with acids, bases producing ammonia salts and acrylic acid. Spontaneous polymerization does not readily occur, but requires the presence of dimethylaminopropionitrile (DMAPN) catalyst and ammonium persulfate. Also, Acrylamide may polymerize upon contact with oxidizing materials e.g. peroxides.. (Acrylamide)
Special Remarks on Corrosivity : Not available.
Polymerization : Will not occur.

Section 11: Toxicological Information

Routes of Entry:
Absorbed through skin. Dermal contact. Eye contact.
Toxicity to Animals :
Acute oral toxicity (LD50): 224 mg/kg (Mouse) (Calculated value for the mixture). Acute dermal toxicity (LD50): 400 mg/kg [Rat]. (Acrylamide).
Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA+ (Proven.) by NIOSH [Acrylamide]. Classified A3 (Proven for animal.) by ACGIH [Acrylamide]. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP, 2 (Suspected for human.) by European Union [Acrylamide]. MUTAGENIC

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Section 11: Toxicological Information (Continued)

EFFECTS: Mutagenic for mammalian somatic cells. [Acrylamide]. Mutagenic for bacteria and/or yeast. [Acrylamide]. Mutagenic for bacteria and/or yeast. [N,N'-methylenebisacrylamide].
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/male [POSSIBLE] [Acrylamide]. Contains material which may cause damage to the following organs: the nervous system, peripheral nervous system, central nervous system (CNS).

Other Toxic Effects on Humans:

Hazardous in case of skin contact (permeator), of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation

Special Remarks on Toxicity to Animals:

Not available.

Special Remarks on Chronic Effects on Humans:

Crosses placental barrier, occurs in breast milk. Accumlates temporarily, but most is broken down within a day. May affect genetic material and and cause adverse reproductive effects (fetotoxicity and male fertility) based on animal studies. May also have tumorigenic effects based on animal studies. (Acrylamide).

Section 12: Ecological Information

Ecotoxicity:

Not available.

BOD5 and COD:

Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

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Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name : Acrylamide 40% solution in water
UN N° : 2074
ADR - Class : 6.1

Sea transport (IMDG) [English only]

Proper shipping name : Acrylamide 40% solution in water
UN N° : 2074
IMO-IMDG - Class or division : 6.1
IMO-IMDG - Packing group : III

Air transport (ICAO-IATA) [English only]

Proper shipping name : Acrylamide 40% solution in water
UN N° : 2074
IATA - Class or division : 6.1
IATA - Packing group : III

Section 15: Other Regulatory Information

Federal and State Regulations: California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Acrylamide California prop. 65 (no significant risk level): Acrylamide California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Acrylamide New York release reporting list: Acrylamide Rhode Island RTK hazardous substances: Acrylamide Pennsylvania RTK: Acrylamide Florida: Acrylamide Massachusetts RTK: Acrylamide New Jersey: Acrylamide TSCA 8(b) inventory: Acrylamide; N,N'-methylenebisacrylamide; Water TSCA 8(d) H and S data reporting: Acrylamide: 10/4/82; Sunset Date: 10/4/92 SARA 302/304/311/312 extremely hazardous substances: Acrylamide SARA 313 toxic chemical notification and release reporting: Acrylamide 45% CERCLA:

Section 15: Other Regulatory Information (Continued)

Hazardous substances.: Acrylamide: 5000 lbs. (2268 kg);

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

R20- Harmful by inhalation. R24/25- Toxic in contact with skin and if swallowed. R36/38- Irritating to eyes and skin. R45- May cause cancer. R62- Possible risk of impaired fertility. S1/2- Keep locked up and out of the reach of children. S36/37- Wear suitable protective clothing and gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S46- If swallowed, seek medical advice immediately and show this container or label. S53- Avoid exposure - obtain special instructions before use.HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: H

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 2

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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