



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Acrylamide Molecular Formula: C₃H₅N O
Catalog Number(s): M-152
Company: Scientific Polymer Products, Inc.
6265 Dean Parkway
Ontario, NY 14519
Telephone: 585/265-0413
Fax: 585/265-1390
Website: www.scipoly.com
Emergency Phone Number: 800-255-3924 (CHEM TEL)

Section 2: Hazards Identification

Classification of the substance or mixture

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

Acute toxicity, Oral, Category 2, H301
Acute toxicity, Dermal, Category 4, H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation, Category 2, H315
Eye irritation, Category 2A, H319
Skin sensitization, Category 1, H317
Germ cell mutagenicity, Category 1B, H340
Carcinogenicity, Category 1B, H350
Reproductive toxicity, Category 2, H361
Specific target organ toxicity- repeated exposure, Oral, Category 1, Peripheral nervous system, H372
Acute aquatic toxicity, Category 3, H402

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H301 Toxic if swallowed.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure if swallowed.
H402 Harmful to aquatic life.

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+P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P302+P352+P312	IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – none

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Section 3: Composition/Information on Ingredients

Ingredient	CAS Number	Concentration (%)
Acrylamide	79-06-1	100

Section 4: First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place.

Light sensitive. Keep in a dry place.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 3/ Toxic hazardous materials or hazardous materials causing chronic effects.

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
Acrylamide	79-06-1	TWA	0.300000 mg/m ³	USA. Occupational Exposure Limits (OSHA)-Table Z-1 Limits for Air Contaminants
	Remarks	Skin designation		
		TWA	0.030000 mg/m ³	USA. NIOSH Recommended Exposure Limits

		Potential Occupational Carcinogen See Appendix A Potential for dermal absorption		
		TWA	0.030000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		PEL	0.03 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

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.

Respiratory protection

Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Powder
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	82-86° C (180-187° F)
f)	Initial boiling point and boiling range	125° C (257° F)
g)	Flash point	138° C (280° F)- Closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Flammability or explosive limits	
	Upper	No data available
	Lower	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	200 g/l (20°C)

o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

Other safety information

No data available

Section 10: Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Oxidizing agents, Acids, Iron and iron salts, Copper, Brass, Free radical initiators

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products- no data available

In the event of fire: see section 5

Section 11: Toxicological Information

Acute toxicity

LD50 Oral- Rat- 177 mg/kg

LC50 Inhalation- Rat- 4 h- > 1,500 mg/m3

LD50 Dermal-Rabbit-1,141 mg/kg
(OECD Test Guideline 402)

Skin Corrosion/Irritation

Skin-Rabbit

Result: No skin irritation
(OECD Test Guideline 404)

Serious Eye Damage/Eye Irritation

Eyes-Rabbit

Result: Irritating to eyes
(OECD Test Guideline 405)

Respiratory or Skin Sensitization

Maximization Test- Guinea pig
May cause allergic skin reaction
(OECD Test Guideline 406)

Germ Cell Mutagenicity

May alter genetic material. In vivo tests showed mutagenic effects.

Carcinogenicity:

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen.

IARC: 2A- Group 2A: Probably carcinogenic to humans (Acrylamide)

ACGIH: Animal carcinogen: Agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) not considered relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

NTP: Reasonably anticipated to be a human carcinogen (Acrylamide)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity

Animal testing did not show any effects on fetal development.

May cause reproductive disorders. Suspected human reproductive toxicant.

Specific Target Organ Toxicity – Single Exposure

No data available

Specific Target Organ Toxicity – Repeated Exposure

Oral- Causes damage to organs through prolonged or repeated exposure. Peripheral nervous system

Aspiration Hazard

No data available

Additional Information:

RTECS: AS3325000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

Toxicity

Toxicity to fish LC50-Pimephales promelas (fathead minnow) 90 mg/l - 96.0 h
NOEC- Cyprinus carpio (Carp)- 5 mg/l- 28 d

Toxicity to daphnia Mortality NOEC- Daphnia magna (Water flea)- 60 mg/l - 48 h
And other aquatic
Invertebrates

EC50- Daphnia magna (Water Flea) – 160 mg/l – 48 h

Persistence & Degradability

Biodegradability Result: 100% - Readily biodegradable
(OECD Test Guideline 301D)

Bioaccumulation Potential

Bioaccumulation Oncorhynchus mykiss (Rainbow trout) – 72 h
-710 µg/l

Bioconcentration factor (BCF): 1.65

Mobility in Soil

No data available

Results of PBT and vPvB Assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other Adverse Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

Section 13: Disposal Considerations

Waste treatment methods

Product

Offer surplus and no-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

DOT (US)

UN number: 2074 Class: 6.1 Packing group: III
Proper shipping name: Acrylamide, solid
Reportable Quantity (RQ): 5000 lbs
Poison Inhalation Hazard: No

IMDG

UN number: 2074 Class: 6.1 Packing group: III
Proper shipping name: Acrylamide, solid

IATA

UN number: 2074 Class: 6.1 Packing group: III
Proper shipping name: Acrylamide, solid

Section 15: Regulatory Information

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

Acrylamide	CAS No. 79-06-1
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SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Acrylamide	CAS No. 79-06-1
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SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Acrylamide	CAS No. 79-06-1
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Pennsylvania Right To Know Components

Acrylamide	CAS No. 79-06-1
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New Jersey Right To Know Components

Acrylamide	CAS No. 79-06-1
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California Prop. 65 Components

Warning! This product contains a chemical known to the State of California to cause cancer.

Acrylamide	CAS No. 79-06-1
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Section 16: Other Information

HMIS Rating

Health:	2
Flammability:	1
Reactivity:	0

NFPA Rating

Health:	2
Flammability:	1
Reactivity:	0

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