

**SAFETY DATA SHEET**

Revision Date: 08/11/17

Section 1: Identification**PRODUCT AND COMPANY INFORMATION**

Product Name: n-Butyl glycidyl ether **Molecular Formula:** C₇H₁₄O₂

Catalog Number(s): M-242

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)**

Flammable liquids, Category 3, H226
Acute toxicity, Oral, Category 4, H302
Acute toxicity, Inhalation, Category 3, H331
Acute toxicity, Dermal, Category 1, H310
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Respiratory sensitization, Category 1, H334
Skin sensitization, Category 1, H317
Germ cell mutagenicity, Category 2, H341
Carcinogenicity, Category 1B, H350
Specific target organ toxicity- single exposure, Category 3, Respiratory system, H335
Acute aquatic toxicity, Category 3, H402
Chronic aquatic toxicity, Category 3, H412

GHS Label elements, including precautionary statements**Pictogram****Signal word**

Danger

Hazard statement(s)

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.

H350 May cause cancer.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P262 Do not get in eyes, on skin or on clothing.
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+P330+P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P310 Immediately call a POISON CENTER/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P361 Remove/Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish.
P403+P233 Store in a well ventilated place. Keep container tightly closed.
P403+P235 Store in a well ventilated place. Keep cool.
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 (%)
n-Butyl glycidyl ether	2426-08-6	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

Take off contaminated clothing and shoes immediately. 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. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. 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

Carbon oxides, Hydrogen chloride gas

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

Section 6: Accidental Release Measures**Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. 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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. 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 inhalation of vapor or mist. Keep away from sources of ignition- No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Air, light and moisture sensitive.

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
n-Butyl glycidyl ether	2426-08-6	TWA	3.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Reproductive damage Adopted values or notations enclosed are those for which changes are proposed in the NIC See Notice of Intended Changes (NIC) Danger of cutaneous absorption Sensitizer		
		C	5.600000 ppm 30.000000 mg/m3	USA. NIOSH Recommended Exposure Limits
		15 minute ceiling value		
		TWA	50.000000 ppm 270.000000 mg/m3	USA. Occupational Exposure Limits (OSHA)- Table Z-1 Limits for Air Contaminants
		The value in mg/m3 is approximate		
		TWA	3 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Sensitization Dermal sensitization Reproduction 2014 Adoption Danger of cutaneous absorption		
Epichlorhydrin	106-89-8	TWA	0.50000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract Irritation Male reproductive Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		Potential Occupational Carcinogen See Appendix A		
		TWA	5.000000 ppm 19.000000 mg/m3	USA. Occupational Exposure Limits (OSHA)- Table Z-1 Limits for Air Contaminants
		Skin designation The value in mg/m3 is approximate		

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(8-inch minimum) and tightly fitting 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: Liquid
b)	Odor	Strong
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	54° C (129° 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	0.91 g/mL @ 25° C (77° F)
n)	Water solubility	Moderately soluble
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

Heat, flames and sparks

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products- no data available

In the event of fire: see section 5

Section 11: Toxicological Information

Acute toxicity

Inhalation- No data available

Dermal- No data available

Skin Corrosion/Irritation

No data available

Serious Eye Damage/Eye Irritation

No data available

Respiratory or Skin Sensitization

No data available

Germ Cell Mutagenicity

No data available

Carcinogenicity

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

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity

No data available

Specific Target Organ Toxicity – Single Exposure

No data available

Specific Target Organ Toxicity – Repeated Exposure

No data available

Aspiration Hazard

No data available

Additional Information:

RTECS: TX4200000

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

Section 12: Ecological Information

Toxicity

No data available

Persistence & Degradability

No data available

Bioaccumulation Potential

No data available

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**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information**DOT (US)**

UN number: 3271 Class: 3 Packing group: III
Proper shipping name: Ethers, n.o.s.
Reportable Quantity (RQ): 2000 lbs
Poison Inhalation Hazard: No

IMDG

UN number: 3271 Class: 3 Packing group: III
Proper shipping name: Ethers, n.o.s.

IATA

UN number: 3271 Class: 3 Packing group: III
Proper shipping name: Ethers, n.o.s.

Section 15: Regulatory Information**SARA 302 Components**

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

	CAS No.
Epichlorhydrin	106-89-8

SARA 313 Components

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

	CAS No.
Epichlorhydrin	106-89-8

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS No.
n-Butyl glycidyl ether	2426-08-6
Epichlorhydrin	106-89-8

Pennsylvania Right To Know Components

	CAS No.
n-Butyl glycidyl ether	2426-08-6
Epichlorhydrin	106-89-8

New Jersey Right To Know Components

	CAS No.
n-Butyl glycidyl ether	2426-08-6
Epichlorhydrin	106-89-8

California Prop. 65 Components

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

Epichlorhydrin	CAS No.
	106-89-8

Section 16: Other Information

HMIS Rating

Health:	4
Flammability:	2
Reactivity:	0

NFPA Rating

Health:	4
Flammability:	2
Reactivity:	0

This material is intended for laboratory use only. It is not sold or intended for drug, household or other uses. The information represents the most accurate and complete data currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.