SAFETY DATA SHEET

Revision Date: 08/15/24

Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]

Catalog Number(s): P-181 **Molecular Formula:** $C_{24}H_{38}O_4$

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)
Reproductive Toxicity, Category 1B, H360

GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)
H360 May damage fertility or the unborn child.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
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- Endocrine disrupting chemical(s)

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 (%)
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7	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. If irritation develops, 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
Carbon oxides

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
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe 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.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as a hazardous waste. 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. 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.

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
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (TLV)
	Remarks	Lower Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans		
		TWA	5mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		ST	10 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		TWA	5 mg/m3	USA. Occupational Exposure Limits (OSHA) Table Z-1 Limits for Air Contaminants

Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

Eye/face protection
Safety glasses with side shields. 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
Impervious clothing. 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 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 or 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	Mild
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	No data available
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	No data available
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
Strong oxidizing agents

Hazardous decomposition products
Other decomposition products- No data available
In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity
LD50 Oral-Rat- 30,000 mg/kg

LD50 Dermal-Rabbit- 25,000 mg/kg

Skin corrosion/irritation
Skin-Rabbit Result: Mild skin irritation -24 h

Serious eye damage/eye irritation
Eyes-Rabbit Result: Mild eye irritation- 24 h

Respiratory or skin sensitization
Maximization Test (GPMT) -Guinea pig Result: Does not cause skin sensitization. (OECD Test Guideline 406)

Germ cell mutagenicity
No data available

Carcinogenicity
This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP or EPA classification.

IARC: 2B- Group 2B: Possibly carcinogenic to humans (Di-(2-ethylhexyl) phthalate [Dioctyl phthalate])
NTP: Reasonably anticipated to be a human carcinogen (Di-(2-ethylhexyl) phthalate [Dioctyl phthalate])
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
May cause congenital malformation of the fetus. Presumed human reproductive toxicant. May cause reproductive disorders

Specific target organ toxicity- single exposure (GHS)
No data available

Specific target organ toxicity- repeated exposure (GHS)
No data available

Aspiration hazard
No data available

Additional Information
RTECS: TI0350000

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)- >0.67 mg/l- 96 h LC50- Oncorhynchus mykiss (Rainbow trout) ->0.32 mg/l -96 h LC50- Cyprinodon variegatus (Sheepshead minnow)- >0.17 mg/l -96 h LC50- Lepomis macrochirus (Bluegill) - >0.20 mg/l- 96 h NOEC-Other fish- > 0.3 mg/l- 96 h
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50-Daphnia magna (water flea)->0.16 mg/l – 48 h

Persistence and degradability

Biodegradability	Result: Readily biodegradable (OECD Test Guideline 301)

Bioaccumulative potential

Bioaccumulation	Oncorhynchus mykiss (Rainbow trout) -100 d -0.014 mg/l Bioconcentration factor (BCF): 113 Remarks: Does not bioaccumulate

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 and disposal. Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Section 13: Disposal Considerations

Waste treatment methods
Product
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: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s. (Di-(2-ethylhexyl) phthalate [Dioctyl phthalate])
Reportable Quantity(RQ): 100 lbs
Poison inhalation hazard: No

IMDG
Not dangerous goods

IATA
Not dangerous goods

Section 15: Regulatory Information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

	CAS-No.
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7

SARA 311/312 Hazards
Chronic Health Hazard

Massachusetts Right to Know Components

	CAS-No.
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7

Pennsylvania Right to Know Components

	CAS-No.
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7

New Jersey Right to Know Components

	CAS-No.
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7

California Prop. 65 Components
WARNING This product contains a chemical known to the State of California to cause birth defects or other reproductive harm

	CAS No.
Di-(2-ethylhexyl) phthalate [Dioctyl phthalate]	117-81-7

Section 16: Other Information

HMIS Rating		**NFPA Rating**	
Health:	1	Health:	1
Flammability:	1	Flammability:	1
Reactivity:	0	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.