

EDU-TRASK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012
APPENDIX D TO §1910.1200)
Issue date: 10/21/2021 Revision date: 10/21/2021 Supersedes: 10/21/2021 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : EDU-TRASK

1.2. Recommended use and restrictions on use

Recommended use : No information available
Restrictions on use : No information available

1.3. Supplier

Thorlabs GmbH
Münchner Weg 1
D-85232 Bergkirchen
Phone: +49 8131 5956-0
Fax: +49 8131 5956-99
e-mail: europe@thorlabs.com

1.4. Emergency telephone number

Emergency number : 1- 800-424-9300 or 1- 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids, Category 4
Acute toxicity (oral), Category 4
Acute toxicity (dermal), Category 4

Combustible liquid
Harmful if swallowed.
Harmful in contact with skin.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

Combustible liquid.
Harmful if swallowed or in contact with skin.

Precautionary statements (GHS US) :

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center or doctor if you feel unwell.
If on skin: Wash with plenty of water.
Call a poison center or doctor if you feel unwell.
Specific treatment see supplemental first aid instruction on this label.
Rinse mouth.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use extinguishing agent suitable for surrounding fire to extinguish.

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Store in a well-ventilated place. Keep cool.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Harmful to aquatic life.

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Benzonitrile

Name	Product identifier	%
Benzonitrile	CAS-No.: 100-47-0	99.96
[5,6]Fullerene-C70-D5h(6)	CAS-No.: 115383-22-7	0.01
Zinc, [5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]-, (SP-4-1)-	CAS-No.: 14074-80-7	0.03

3.2. Mixtures

Not applicable.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse eyes with water as a precaution. If eye irritation persists, consult a specialist.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Harmful if swallowed or in contact with skin.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media : High volume water jet.

5.2. Specific hazards arising from the chemical

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Fire hazard	: Combustible liquid.
Explosion hazard	: Vapours may form explosive mixtures with air when the substance is heated above its flash point.
Hazardous decomposition products in case of fire	: Toxic fumes may be released, such as carbon oxides, nitrogen oxides.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate personnel to a safe area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate ventilation, especially in confined areas.
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6.1.1. For non-emergency personnel

Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Evacuate personnel to a safe area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.
Local and general ventilation	: Ensure adequate ventilation, especially in confined areas.
Hygiene measures	: Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Keep containers closed. Store in a dry, cool and well-ventilated place. Keep only in original container.
Incompatible materials	: Strong oxidizing agent.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Benzonitrile (100-47-0)

USA - IDLH - Occupational Exposure Limits

IDLH [ppm]	14 ppm
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[5,6]Fullerene-C70-D5h(6) (115383-22-7)

No additional information available

Zinc, [5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]-, (SP-4-1)- (14074-80-7)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Remove all sources of ignition. Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves.

Eye protection:

Safety glasses.

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid
Colour	: Dark red
Odour	: Almond-like odour
Odour threshold	: No data available
pH	: No data available
Melting point	: Benzonitrile (100-47-0): -13 °C
Freezing point	: No data available
Boiling point	: Benzonitrile (100-47-0): 191 °C
Flash point	: Benzonitrile (100-47-0): 70 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Combustible liquid
Vapour pressure	: Benzonitrile (100-47-0): 0.72 hPa (20 °C)
Relative vapour density at 20 °C	: Benzonitrile (100-47-0): 3.56
Relative density	: No data available
Density	: Benzonitrile (100-47-0): 1.01 g/cm ³ (20 °C)
Solubility	: Benzonitrile (100-47-0): 10 g/L (20 °C)
Partition coefficient n-octanol/water (Log Pow)	: Benzonitrile (100-47-0): 1.6
Auto-ignition temperature	: Benzonitrile (100-47-0): 550 °C

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Decomposition temperature	: Decomposition when heated
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: Benzonitrile (100-47-0): 0.9 - 12 vol.%
Explosive properties	: Vapors may form explosive mixtures with air when the substance is heated above its flash point
Oxidising properties	: Non oxidizing

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat, flames, sparks. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Not classified

Benzonitrile (100-47-0)	
LD50 oral rat	700 mg/kg
LD50 dermal rabbit	1250 mg/kg
LC50 Inhalation - Rat [ppm]	950 ppm/8 h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life.

Benzonitrile (100-47-0)	
LC50 - Fish [1]	78 mg/L/96 h (Pimephales promelas)
LC50 - Fish [2]	78 mg/L/96 h (Lepomis macrochirus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Benzonitrile (100-47-0)	
Partition coefficient n-octanol/water (Log Pow)	1.6

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable.
Proper Shipping Name (TDG) : Not applicable.
Proper Shipping Name (IMDG) : Not applicable.
Proper Shipping Name (IATA) : Not applicable.

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable.

TDG
Transport hazard class(es) (TDG) : Not applicable.

IMDG

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Transport hazard class(es) (IMDG) : Not applicable.

IATA

Transport hazard class(es) (IATA) : Not applicable.

14.4. Packing group

Packing group (DOT) : Not applicable.
Packing group (TDG) : Not applicable.
Packing group (IMDG) : Not applicable.
Packing group (IATA) : Not applicable.

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Benzonitrile	100-47-0	Present	Active	
Zinc, [5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]-, (SP-4-1)-	14074-80-7	Present	Active	

Benzonitrile (100-47-0)

CERCLA RQ 5000 lb

15.2. International regulations

CANADA

Benzonitrile (100-47-0)

Listed on the Canadian DSL (Domestic Substances List)

Zinc, [5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]-, (SP-4-1)- (14074-80-7)

Listed on the Canadian NDSL (Non-Domestic Substances List)

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EU-Regulations

Benzonitrile (100-47-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Benzonitrile (100-47-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

[5,6]Fullerene-C70-D5h(6) (115383-22-7)

Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the Vietnam NCI (National Chemicals Inventory)

Zinc, [5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]-, (SP-4-1)- (14074-80-7)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Issue date	: 10/21/2021
Revision date	: 10/21/2021
Data sources	: ECHA (European Chemicals Agency). Loli.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: No information available.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.