

Safety Data Sheet

Tinuvin® 477

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Version: 4.0

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(30479065/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Tinuvin® 477

Recommended use of the chemical and restriction on use

Recommended use*: UV absorber

Recommended use*: UV absorber

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: triazine, derivative

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Liq.

3

Flammable liquids

STOT SE

3 (Vapours may cause drowsiness and dizziness.)

Specific target organ toxicity — single exposure

Label elements

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Pictogram:



Signal Word:
Warning

Hazard Statement:

H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

Precautionary Statements (Prevention):

P271 Use only outdoors or in a well-ventilated area.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves and eye protection or face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P243 Take action to prevent static discharges.
P241 Use explosion-proof electrical, ventilating and lighting equipment.
P240 Ground and bond container and receiving equipment.
P242 Use only non-sparking tools.

Precautionary Statements (Response):

P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353 IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P370 + P378 In case of fire: Use foam or dry powder for extinction.

Precautionary Statements (Storage):

P233 Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

1-methoxy-2-propylacetate

CAS Number: 108-65-6

Content (W/W): >= 15.0 - < 25.0%

Synonym: 2-Methoxy-1-methylethyl acetate; 1-Methoxy-2-propyl acetate

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4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Breathing protection required.

Can release flammable vapours. Wind direction should be noted. Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Ensure good work practices are implemented. Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour) Use suitable chemically resistant gloves. Wear suitable respiratory protection. Clear transfer lines prior to de-coupling

Protection against fire and explosion:

Sources of ignition should be kept well clear. Take precautionary measures against static discharges. If delivered in plastic packing, highest permissible emptying temperature is 5 Kelvin below the flash point.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and in a cool place.

Storage stability:

Storage temperature: 5 - 35 °C

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:

Ensure adequate ventilation.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves

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Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	liquid
Odour:	ester-like
Odour threshold:	No applicable information available.
Colour:	yellow to brownish
pH value:	not applicable
Freezing point:	not determined
Melting point:	not determined
Boiling point:	146.4 °C (1,013.25 hPa)
Flash point:	Information applies to the solvent. 42 °C (closed cup) Information applies to the solvent.
Flammability:	not determined
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	not determined
Vapour pressure:	3 hPa (18.4 °C) Information applies to the solvent.
Density:	1.15 g/cm ³ (20 °C)
Relative density:	No data available.
Vapour density:	not determined
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures
Thermal decomposition:	not determined
Viscosity, dynamic:	not determined
Solubility in water:	partly soluble
Evaporation rate:	not determined

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

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The product is chemically stable.

Conditions to avoid

Avoid electro-static discharge.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

not determined

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion. Of low toxicity after short-term skin contact.

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 423)

The product has not been tested. The statement has been derived from the properties of the individual components.

Inhalation

Type of value: LC50

Species: rat

No data available concerning acute toxicity.

Dermal

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 402)

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment other acute effects

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

The product has not been tested. The statement has been derived from the properties of the individual components.

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Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight irritation to the eyes. Based on available Data, the classification criteria are not met.

Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

The product has not been tested. The statement has been derived from the properties of the individual components.

Eye

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from the properties of the individual components.

Mouse Local Lymph Node Assay (LLNA)

Species: mouse

Result: Non-sensitizing.

Method: OECD Guideline 429

The product has not been tested. The statement has been derived from the properties of the individual components.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Prolonged or repeated contact may cause mild skin irritation. The product has not been tested. The statement has been derived from the properties of the individual components.

Genetic toxicity

Assessment of mutagenicity: Mutagenicity tests revealed no genotoxic potential. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: Contains a reproductive toxin. Based on available Data, the classification criteria are not met.

Teratogenicity

Assessment of teratogenicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

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12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

LC50 > 100 mg/l, Fish (OECD Guideline 203)

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic invertebrates

EL50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic plants

EC50 (72 h) > 100 mg/l (growth rate), Desmodosmus subspicatus (OECD Guideline 201, static)

The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 static

municipal sewage treatment plant effluent/EC50 (3 h): > 100 mg/l

The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Not readily biodegradable (by OECD criteria). The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested.

Mobility in soil

Assessment transport between environmental compartments

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No data available.

Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

WARNING: Empty containers may still contain hazardous residue.

RCRA:

This product meets the D001 (characteristic ignitable) criteria.

14. Transport Information

Land transport

USDOT

Hazard class:	3
Packing group:	III
ID number:	UN 1993
Hazard label:	3
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (contains 2-METHOXY-1-METHYLETHYL ACETATE)

Sea transport

IMDG

Hazard class:	3
Packing group:	III
ID number:	UN 1993
Hazard label:	3
Marine pollutant:	NO
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (contains 2-METHOXY-1-METHYLETHYL ACETATE)

Air transport

IATA/ICAO

Hazard class:	3
Packing group:	III
ID number:	UN 1993
Hazard label:	3
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (contains 2-METHOXY-1-METHYLETHYL ACETATE)

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15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

NFPA Hazard codes:

Health: 2 Fire: 3 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2019/12/18

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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