

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Version: 6.0

Page: 1/11

(30265919/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Tinuvin® 5248

Recommended use of the chemical and restriction on use

Recommended use*: stabilizer, for industrial use only

Recommended use*: stabilizer; for industrial use only

* 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

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

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

Other means of identification

Chemical family: mixture, light stabilizer

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
Skin Sens.	1	Skin sensitization
Repr.	2 (fertility)	Reproductive toxicity
Aquatic Acute	1	Hazardous to the aquatic environment - acute
Aquatic Chronic	1	Hazardous to the aquatic environment - chronic

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01
Version: 6.0

Page: 2/11
(30265919/SDS_GEN_US/EN)

Label elements

Pictogram:



Signal Word:
Warning

Hazard Statement:

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P273	Avoid release to the environment.
P261	Avoid breathing mist or vapour or spray.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take action to prevent static discharges.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P242	Use only non-sparking tools.

Precautionary Statements (Response):

P303 + P361 + P353	IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P391	Collect spillage.
P308 + P313	IF exposed or concerned: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use foam or dry powder for extinction.

Precautionary Statements (Storage):

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

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.
------	---

Hazards not otherwise classified

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

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01
Version: 6.0

Page: 3/11
(30265919/SDS_GEN_US/EN)

3. Composition / Information on Ingredients

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

1-methoxypropan-2-ol

CAS Number: 107-98-2

Content (W/W): ≥ 7.0 - $< 10.0\%$

Synonym: 1-Methoxy-2-propanol; Propylene glycol monomethyl ether

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

CAS Number: 41556-26-7

Content (W/W): ≥ 30.0 - $< 40.0\%$

Synonym: Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidyl) ester

Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

CAS Number: 82919-37-7

Content (W/W): ≥ 10.0 - $< 15.0\%$

Synonym: Decanedioic acid, 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidyl) ester

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately 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 affected areas thoroughly with soap and water. Seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

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.

Information on: 1-methoxypropan-2-ol

Symptoms: Overexposure may cause:, lacrimation

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Page: 4/11

Version: 6.0

(30265919/SDS_GEN_US/EN)

Information on: bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Symptoms: Overexposure may cause: skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Symptoms: Overexposure may cause: skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

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

Unsuitable extinguishing media for safety reasons:
No data available.

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.

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.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Page: 5/11

Version: 6.0

(30265919/SDS_GEN_US/EN)

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

7. Handling and Storage

Precautions for safe handling

Wear suitable protective clothing, gloves, eye protection and/or respiratory protection.

Use with local exhaust ventilation. Provide extract ventilation to points where emissions occur (LEV). Avoid contact with the skin, eyes and clothing. Provide specific employee training to prevent/minimize exposures.

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.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

1-methoxypropan-2-ol	ACGIH, US:	TWA value 50 ppm ;
	ACGIH, US:	STEL value 100 ppm ;

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

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

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

Body protection:

Impermeable protective clothing

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	viscous, liquid
Odour:	aromatic
Odour threshold:	No applicable information available.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Version: 6.0

Page: 6/11

(30265919/SDS_GEN_US/EN)

Colour:	yellowish	
pH value:	not determined	
Freezing point:	not determined	
Melting point:	not determined	
Boiling point:	120.1 °C	
	Information applies to the solvent.	
Boiling range:	No data available.	
Flash point:	42.4 °C	(ISO 2719, closed cup)
Flammability:	Flammable liquid and vapour.	
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:	not determined	
Density:	1.029 g/cm ³ (20 °C)	
Relative density:	1.029 (20 °C)	
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures	
Thermal decomposition:	not determined	
Viscosity, dynamic:	2,400 mPa.s	
Solubility in water:	insoluble	
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 chemically stable.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Conditions to avoid

Avoid electro-static discharge. Avoid all sources of ignition: heat, sparks, open flame. See SDS section 7 - Handling and storage.

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.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01
Version: 6.0

Page: 7/11
(30265919/SDS_GEN_US/EN)

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: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 - 5,000 mg/kg

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

Exposure time: 4 h

not determined

Dermal

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

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

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

Skin

Species: rabbit

Result: non-irritant

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

Eye

Species: rabbit

Result: non-irritant

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

Sensitization

Assessment of sensitization: May cause sensitization by skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01
Version: 6.0

Page: 8/11
(30265919/SDS_GEN_US/EN)

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Prolonged or repeated exposure may cause neurological disturbances. The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies. The product has not been tested. The statement has been derived from the properties of the individual components. The substance may cause damage to the liver after repeated inhalation of high doses.

Information on: 1-methoxypropan-2-ol

Assessment of repeated dose toxicity: May affect the liver as indicated in animal studies. The substance may cause damage to the kidney after repeated inhalation. Effect found in rodents only. The relevance to humans is questionable.

Information on: Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Assessment of repeated dose toxicity: The substance may reversibly affect the nervous system, but there are no indications of permanent nerve cell damage. The effects were only observed at doses/concentrations not relevant for classification and/or practical use conditions.

Information on: bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Assessment of repeated dose toxicity: The substance may reversibly affect the nervous system, but there are no indications of permanent nerve cell damage. The effects were only observed at doses/concentrations not relevant for classification and/or practical use conditions.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. 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: The potential to impair fertility cannot be excluded when given at maternally toxic doses. The product has not been tested. The statement has been derived from the properties of the individual components.

Teratogenicity

Assessment of teratogenicity: The substance did not cause malformations in animal studies. When given in high doses fetotoxicity was observed. The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Version: 6.0

Page: 9/11

(30265919/SDS_GEN_US/EN)

Toxicity to fish

LC50 (96 h) <= 1 mg/l, Fish

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

Aquatic invertebrates

LC50 (48 h), daphnia (other)

not determined

Aquatic plants

EC50 (72 h), algae (other)

not determined

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

other

bacteria/EC50 (0.5 h):

not determined

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

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.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Version: 6.0

Page: 10/11

(30265919/SDS_GEN_US/EN)

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:

Not a hazardous waste under RCRA (40 CFR 261).

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 1-METHOXYPROPANOL-2, REACTION MASS OF PENTAMETHYL-PIPERIDYL SEBACATE)

Sea transport

IMDG

Hazard class: 3
Packing group: III
ID number: UN 1993
Hazard label: 3, EHSM
Marine pollutant: YES
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains 1-METHOXYPROPANOL-2, REACTION MASS OF PENTAMETHYL-PIPERIDYL SEBACATE)

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 1-METHOXYPROPANOL-2, REACTION MASS OF PENTAMETHYL-PIPERIDYL SEBACATE)

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.

Safety Data Sheet

Tinuvin® 5248

Revision date : 2021/12/01

Page: 11/11

Version: 6.0

(30265919/SDS_GEN_US/EN)

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
100 LBS	107-98-2	1-methoxypropan-2-ol

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	107-98-2	1-methoxypropan-2-ol
PA	107-98-2	1-methoxypropan-2-ol

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including FORMALDEHYDE (GAS), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 2 Fire: 3 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2021/12/01

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.

Tinuvin® 5248 is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. Due to the merger of CIBA and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

END OF DATA SHEET