

Safety Data Sheet according to Directive 91/155/EEC

May not comply with national legislation; shall be used only as a source of information.

TINUVIN 1130

Revision 31.01.2003

(dd.mm.yyyy)

1. Identification of the Substance/Preparation and the Company/Undertaking

Product name	TINUVIN 1130
Chemical identification	Mix of: a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-hydroxypoly(oxyethylene); a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)
CAS Number	-
Use	Stabiliser
Producer/Supplier	CIBA SPEZIALITÄTENCHEMIE AG KLYBECKSTRASSE 141 POSTFACH 4002 BASEL SWITZERLAND
Phone Number	+41 (61) 6361111
Telefax	+41 (61) 6361212
Information	Product Safety and Regulatory Affairs
Telefax	+41 (61) 6368601
Emergency Phone Number (24h)	+41 (61) 6965151

2. Composition/Information on Ingredients

Substances presenting a health or environmental hazard

EC-Number	CAS Number	Chemical Name	Content	Symbol(s)	R-Phrase(s)
400-830-7	-	Mix of: a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-hydroxypoly(oxyethylene); a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	100 %	Xi - N	R43 - R51/53

3. Hazards Identification

Classified as hazardous according the EU directives.

Xi Irritant

N Dangerous for the environment

May cause sensitization by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First Aid Measures

Skin contact

Wipe with absorbent paper or textile towels. Wash off with soap and plenty of water. Do not use organic solvents. In case of dermatitis, seek medical attention.

Eye contact

Rinse immediately with plenty of water for at least 15 minutes. In case of eye irritation, seek medical attention.

Inhalation

Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. If affected person feels unwell, seek medical advice. In case of prolonged exposure, seek medical attention.

Ingestion

Immediately give plenty (> 500 ml) of water (if possible charcoal slurry). In case of spontaneous vomiting be sure that vomitus can freely drain due to danger of suffocation. Give water repeatedly. Artificial induction of vomiting should be

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restricted to first aid staff. Give nothing by mouth in cases of unconsciousness or convulsion. Seek medical advice.

5. Fire-Fighting Measures

Suitable extinguishing media

Water spray, Foam, Carbon dioxide (CO₂), Dry powder

Extinguishing media which must not be used for safety reasons

High volume water jet

Exposure hazards

Contaminated water from fire hoses or sprinklers, etc., must be prevented from draining into watercourses, sewers, or the ground water. Sufficient measures must be taken to retain water used for extinguishing. Contaminated water and soil must be disposed of in conformity with local regulations.

Special protective equipment for firefighters

Wear full protective clothing. Wear self-contained breathing apparatus.

Combustion products

Oxides of carbon; Oxides of nitrogen (NO_x); Toxic gases/vapours

6. Accidental Release Measures

Personal precautions

Avoid contact with skin, eyes and clothing.

Environmental precautions

Do not flush into surface water, sanitary sewer or ground water system.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect the spilled product into suitable containers, which must be tightly sealed and properly labelled.

7. Handling and Storage

Handling

Handle and open container with care. Avoid dust formation and ignition sources. Ensure good local exhaust ventilation. Do not eat, drink or smoke at the workplace.

Storage

Keep away from food and drink. Store in the original container securely closed. This product can form an ignitable vapour/air mixture. Take precautionary measures against static discharges, e.g. by using proper earthing techniques.

8. Exposure Controls / Personal Protection

Exposure limit(s)

CIEL-TWA Ciba internal exposure limit (8 hour time weighted average)

1.0 mg/m³

Skin sensitising in animal study

Technical measures/Precautions

Exposure limit(s) should be monitored using suitable analytical equipments.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection

Protective gloves

Eye protection

Suitable goggles or face protection

Skin and body protection

Working clothes , Closed footwear

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9. Physical and Chemical Properties

Form	liquid	
Form	viscous	
Colour	yellow to light brown	
Odour	odourless	
Melting/freezing temperature	-40 °C	
Boiling point/range 0.011 kPa	166 °C	OECD 104
Relative density 20 °C	1.17 g/cm ³	EEC A 3
Flash point	114 °C	DIN 51758
Flammability	not tested	
Ignition Temperature	405 °C	DIN 51794
Oxidising properties	not applicable	
Self-ignition temperature	not tested	
Water solubility 20 °C	7.7 mg/l	EEC A 6
Solubility	not tested	
Partition coefficient; Log Pow	< -1.3	OECD 107
pH-value 1 % suspension in water 20 - 25 °C	ca 6.5	
Dynamic Viscosity 20 °C	7400 mPa.s	
Explosive properties	not explosive	EEC A 14
Evaporation rate	not tested	
Vapour density	not tested	

10. Stability and Reactivity

Decomposition temperature	> 250 °C
Conditions to avoid	Static discharges.
Materials to avoid	Strong acids, strong bases and strong oxidising agents.
Hazardous decomposition products	Oxides of carbon, Oxides of nitrogen (NO _x), Toxic gases/vapours

11. Toxicological Information

Acute oral toxicity <i>Rat</i>	LD50 > 2000 mg/kg	OECD 401
Acute dermal toxicity <i>Rat</i>	LD50 > 2000 mg/kg	OECD 402
Acute Inhalation Toxicity <i>Rat 14 d</i>	LC50 > 5800 mg/m ³	OECD 403
Acute eye irritation/corrosion <i>Rabbit</i>	not irritant	OECD 405
Acute dermal irritation/corrosion <i>Rabbit</i>	not irritant	OECD 404
Acute skin sensitisation <i>Guinea pig</i>	sensitising	OECD 406

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12. Ecological Information

Acute toxicity to fish <i>Fish general (Pisces)</i>	LC50	2.8 mg/l	OECD 203
Acute toxicity to daphnia <i>Daphnia magna</i>	EC50	3.8 mg/l	OECD 202
Acute toxicity to bacteria <i>Bacteria</i>	IC50	not tested	
Acute toxicity to algae <i>Algae</i>	EC50	> 9 mg/l	OECD 201
		No effects at the highest tested concentration.	
Biodegradability		Not biodegradable	OECD 301 B

Ecotoxic effects

Do not discharge product uncontrolled into the environment.

13. Disposal Considerations

Waste from residues / unused products

Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.

Contaminated packaging

Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

14. Transport Information

Flash point	114 °C
ADR/RID	Class: 9 UN No.: 3082 Packaging group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Additional Information: (BENZOTRIAZOLE DERIVATIVE MIXTURE)
IMO	Class: 9 UN No.: 3082 Packaging group: III Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Additional Information: (BENZOTRIAZOLE DERIVATIVE MIXTURE)
ICAO	Class: 9 UN No.: 3082 Packaging group: III Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Additional Information: (BENZOTRIAZOLE DERIVATIVE MIXTURE)

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15. Regulatory Information

Classification	Classification according to EU, Annex 1; EC Label
Symbol(s)	Xi Irritant N Dangerous for the environment
R-Phrase(s)	R43 May cause sensitization by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-Phrase(s)	S36/37 Wear suitable protective clothing and gloves. S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
Contains	Mix of: a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-hydroxypoly(oxyethylene); a-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyl-o-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)
EC Number	400-830-7

16. Other Information

R-phrases from chapter 2	R43 May cause sensitization by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Essential changes	Section 1 ; Section 2 ; Section 3 ; Section 7 ; Section 9 ; Section 11 ; Section 12 ; Section 14 ; Section 15

TINUVIN is a registered trademark.

Important

THIS MATERIAL IS NOT INTENDED FOR USE IN PRODUCTS FOR WHICH PROLONGED CONTACT WITH MUCOUS MEMBRANES, BODY FLUIDS OR ABRADED SKIN, OR IMPLANTATION WITHIN THE HUMAN BODY, IS SPECIFICALLY INTENDED, UNLESS THE FINISHED PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH NATIONALLY AND INTERNATIONALLY APPLICABLE SAFETY TESTING REQUIREMENTS. BECAUSE OF THE WIDE RANGE OF SUCH POTENTIAL USES, CIBA IS NOT ABLE TO RECOMMEND THIS MATERIAL AS SAFE AND EFFECTIVE FOR SUCH USES AND ASSUMES NO LIABILITY FOR SUCH USES.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.