

1 Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name: Hirnholz-Versiegelung
different colours****55612 ff****Article number:** 55612 ff**1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the preparation:**

Coating material for industrial or professional end-uses.

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**ADLER WERK Lackfabrik
Johann Berghofer GmbH & Co KG
Bergwerkstraße 22
A-6130 Schwaz

tel: +43 5242 6922-713

fax: +43 5242 6922-709

Further information obtainable from:Bereich Forschung und Entwicklung
Mon-Thu: 7.00 - 12.00 and 12.55 - 16.25
Fri : 7.00 - 12.15tel: +43 5242 6922-713
mail: sdb-info@adler-lacke.com**1.4 Emergency telephone number:**

Guy's & St Thomas' Poisons Unit, London

tel: +44 (0)20 7188 0100
mail: guyspoisons@gstt.nhs.uk**2 Hazards identification****2.1 Classification of the substance or mixture****Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable**Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

Safety phrases:

2 Keep out of the reach of children.

29 Do not empty into drains.

60 This material and its container must be disposed of as hazardous waste.

Special labelling of certain preparations:Contains Hydroxyphenyl-benzotriazole derivative, bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate.
May produce an allergic reaction.**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** The mixture does not meet the criteria for classification as PBT.

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vPvB: The mixture does not meet the criteria for classification as vPvB.

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3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: Water-based polymer dispersion with additives - contains film preservatives.

Dangerous components:

CAS: 57-55-6 EINECS: 200-338-0	propane-1,2-diol substance with a Community workplace exposure limit	1.0-<2.5%
CAS: 121-44-8 EINECS: 204-469-4 Reg.nr.: 01-2119475467-26	triethylamine C R35; Xn R20/21/22; F R11 Flam. Liq. 2, H225; Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	0.5-<1.0%
ELINCS: 400-830-7	Hydroxyphenyl-benzotriazole derivative Xi R43; N R51/53 Aquatic Chronic 2, H411; Skin Sens. 1, H317	0.3-<0.5%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44	2-(2-butoxyethoxy)ethanol Xi R36 Eye Irrit. 2, H319	0.3-<0.5%
EC number: 915-687-0 Reg.nr.: 01-2119491304-40	Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate Xi R43; N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	<0.3%

Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

General information

Remove contaminated pieces of clothing immediately. In case of doubt or if health impairment occurs, please consult a doctor. Show the safety data sheet and/or the container to the doctor.

After inhalation

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness, keep and move the person in a stable lateral position.

After skin contact

Remove contaminated clothes.

Clean the skin with water and soap or use a suitable skin cleaning agent.

Do not use any solvents or thinners!

After eye contact

Remove contact lenses. Rinse the eyes with open eyelids with plenty of clean and fresh water for at least 10 minutes and seek medical advice promptly.

After swallowing

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In case it is swallowed, rinse the mouth with plenty of water (only if the person is conscious) and consult a doctor immediately.

Keep the person affected quiet and calm.

Do not induce vomiting!

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

In case of unconsciousness, please call a doctor on emergency service.

5 Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents Water with full jet.

5.2 Special hazards arising from the substance or mixture

Thick smoke may occur in case of a fire. Exposure to decomposed products can cause health impairment.

Hazardous gases are formed in case of heating / fire.

Inhaling the decomposed products may cause serious damage to health.

5.3 Advice for firefighters

Do not allow extinguishing water to enter into the sewage system or watercourses.

Protective equipment: If applicable, breathing apparatus may be necessary.

6 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Keep persons not involved away.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

Dispose of the material collected according to regulations.

6.4 Reference to other sections

No dangerous substances are released.

Please refer to section 7 for notes on safe handling.

Please refer to section 8 for information on personal safety gear.

Please refer to section 13 on information regarding disposal.

7 Handling and storage**7.1 Precautions for safe handling**

No special measures required.

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Owing to the proportion of organic solvent in the mixture:
Avoid contact with the skin and eyes.
Do not inhale dust, particles and spray mist when using this mixture.
Avoid inhaling sanding dust.
Do not smoke, eat or drink while working.
Refer to section 8 for personal safety gear.
Never empty out containers under pressure - they are not pressure vessels!
Always store in containers that contained the same material as the original container.
Follow the statutory protection and safety rules and regulations.
Do not allow it to get into the sewage system or flowing water.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

The official regulations for storing liquids must be observed.

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Keep away from oxidants as well as strongly alkaline and acidic materials.

Further information about storage conditions:

Please follow the instructions on the label.
Store between 10 and 30 °C in a dry and well-ventilated place, and protect against heat and direct sunlight.

Owing to the proportion of organic solvent in the mixture:

- Keep the container tightly closed.
- Keep away from sources of ignition.
- Smoking prohibited.
- Entry for authorised persons only.
- Close the open container carefully and keep it straight to prevent leakage.
- Store in the original container.

7.3 Specific end use(s)

Please refer to our technical data sheet for additional notes and instructions.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEL	Long-term value: 474* 10** mg/m ³ , 150* ppm *total vapour and particulates **particulates
121-44-8 triethylamine	
WEL	Short-term value: 17 mg/m ³ , 4 ppm Long-term value: 8 mg/m ³ , 2 ppm Sk
112-34-5 2-(2-butoxyethoxy)ethanol	
WEL	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm

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DNELs

121-44-8 triethylamine

Dermal	Long-term exposure, systemic effects	12.1 mg/kg bw/day (Worker)
Inhalative	Long-term exposure, local effects	8.4 mg/m ³ (Worker)
	Long-term exposure, systemic effects	8.4 mg/m ³ (Worker)
	Short-term exposure, local effects	12.6 mg/m ³ (Worker)
	Short-term exposure, systemic effects	12.6 mg/m ³ (Worker)

112-34-5 2-(2-butoxyethoxy)ethanol

Oral	Long-term exposure, systemic effects	1.25 mg/kg bw/day (Consumer)
Dermal	Long-term exposure, systemic effects	20 mg/kg bw/day (Worker) 10 mg/kg bw/day (Consumer)
	Long-term exposure, systemic effects	67.5 mg/m ³ (Worker) 34 mg/m ³ (Consumer)
Inhalative	Long-term exposure, local effects	10 ppm (Worker) 5 ppm (Consumer)
	Long-term exposure, local effects; ppm	67.5 mg/m ³ (Worker) 34 mg/m ³ (Consumer)
	Long-term exposure, systemic effects	10 ppm (Worker) 5 ppm (Consumer)
	Long-term exposure, systemic effects; ppm	50.6 mg/m ³ (Consumer)
	Short-term exposure, local effects	14 ppm (Worker)
	Short-term exposure, local effects; ppm	7.5 ppm (Consumer)

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Oral	Long-term exposure, systemic effects	1.25 mg/kg bw/day (Consumer)
	Short-term exposure, systemic effects	1.25 mg/kg bw/day (Consumer)
Dermal	Long-term exposure, systemic effects	2.5 mg/kg bw/day (Worker) 1.25 mg/kg bw/day (Consumer)
	Short-term exposure, systemic effects	2.5 mg/kg bw/day (Worker)
	Long-term exposure, systemic effects	1.25 mg/kg bw/day (Consumer)
Inhalative	Long-term exposure, systemic effects	2.35 mg/m ³ (Worker) 0.58 mg/m ³ (Consumer)
	Short-term exposure, systemic effects	2.35 mg/m ³ (Worker)
	Short-term exposure, systemic effects	0.58 mg/m ³ (Consumer)

PNECs

121-44-8 triethylamine

Freshwater	0.064 mg/l (Environmental compartment)
Freshwater sediment	0.1992 mg/kg (Environmental compartment)
Seawater	0.0064 mg/l (Environmental compartment)
Sewage plant	100 mg/l (Environmental compartment)
Soil	2.361 mg/kg (Environmental compartment)

112-34-5 2-(2-butoxyethoxy)ethanol

Freshwater	1 mg/l (Environmental compartment)
Freshwater sediment	4 mg/kg (Environmental compartment)

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Safety data sheet

according to 1907/2006/EC, Article 31

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Seawater	0.1 mg/l (Environmental compartment)
Seawater sediment	0.4 mg/kg (Environmental compartment)
Sewage plant	200 mg/l (Environmental compartment)
Sporadic release	3.9 mg/l (Environmental compartment)
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
Freshwater	0.0022 mg/l (Environmental compartment)
Freshwater sediment	1.05 mg/kg (Environmental compartment)
Seawater	0.00022 mg/l (Environmental compartment)
Seawater sediment	0.11 mg/kg (Environmental compartment)
Sewage plant	1 mg/l (Environmental compartment)
Soil	0.21 mg/kg (Environmental compartment)
Sporadic release	0.009 mg/l (Environmental compartment)

Additional information: The actual lists were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

In case of insufficient exhaust ventilation wear a respiratory protective device during the spray application (Combinad filters A2/P2 - EN141/EN143).

Protection of hands:

Use rubber or polyvinyl chloride gloves for protection against liquid splashes during brief working operations.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Where liquid splashes may occur, use safety goggles with side protection.

Body protection:

Wear protective clothing (e.g. made of cotton). For skin protection apply a water-in-oil emulsion on the skin not covered by the suit.

Additional instructions for the layout of technical equipment:

Please refer to section 7. Please follow the rules for "Processing of coating materials" (BGR 500, Part 2, Section 2.29).

Limitation and supervision of exposure into the environment Please refer to sections 6 and 7.

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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	fluid
Colour:	different colours
Odour:	specific type
Odour threshold:	Not determined.

pH-value at 20 °C: 7.8 - 8.2

Change in condition

Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	100 °C

Flash point: Not applicable

Flammability (solid, gaseous) Not applicable.

Ignition temperature: 371 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:	Does not apply (see note in chapter 16)
Upper:	Not determined.

Vapour pressure at 20 °C: 23 hPa

Density at 20 °C:	1.03 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with

Water:	Completely miscible
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Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic at 20 °C:	9000 - 10000 mPas
kinematic:	Not determined.

Solvent content:

Organic solvents:	5.8 %
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VOC content (EU): 6.34 %

Solids content: 33.4 %
± 1,5 %

9.2 Other information

Other physical and chemical information have not been obtained.

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10 Stability and reactivity

10.1 Reactivity

It reacts with strong oxidisation and reduction agents under severe influence of heat. It reacts with strong alkalis under severe influence of heat. There is risk of explosion in the event of uncontrolled reaction.

10.2 Chemical stability

The product is chemically stable under normal ambient conditions (room temperature).

Conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

No hazardous reaction is to be expected if used properly.

10.4 Conditions to avoid

Temperatures above room temperature accelerate the transition from the liquid form into the vapour form and the formation of explosive atmospheres.

10.5 Incompatible materials: It attacks plastics and rubber.

10.6 Hazardous decomposition products:

No composition when used as directed.

Decomposes on heating / combustion into hazardous gases (e.g. carbon monoxide).

11 Toxicological information

11.1 Information on toxicological effects

There are no toxicological findings on the mixture available.

Acute toxicity:

LD/LC50 values relevant for classification:

121-44-8 triethylamine

Oral	LD50	460 mg/kg (rat)
Dermal	LD50	570 mg/kg (rabbit)

111-90-0 2-(2-ethoxyethoxy)ethanol

Oral	LD50	5500 mg/kg (rat)
Dermal	LD50	6000 mg/kg (rat)

Hydroxyphenyl-benzotriazole derivative

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/14 d	5.8 mg/l (rat)

112-34-5 2-(2-butoxyethoxy)ethanol

Oral	LD50	2000 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

577-11-7 docusate sodium

Oral	LD50	1900 mg/kg (rat)
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Primary irritant effect:

on the skin: No irritating effect.

on the eye: No irritating effect.

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Irritation:

Longer or repeated contact leads to degreasing of the skin and cannot cause harm to the skin by contact (Contact Dermatitis).

Corrosive (or burning) effect: Data not available.

Sensitization: No sensitizing effects known.

Toxicity with repeated administration: Data not available.

Carcinogenicity: Data not available.

Mutagenicity: Data not available.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Other instructions:

The toxicological classification of the mixture is based on the results of the calculation method of the Preparations Directive, 1999/45 EC. Based on the experience of the manufacturer, risks and hazards beyond those given in the label are not expected.

12 Ecological information

12.1 Toxicity:

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate

EC50/24 h	20 mg/l (Daphnia magna) (OECD 202)
LC50/96 h	0.97 mg/l (Lepomis macrochirus) (OECD 203)
	7.9 mg/l (Oncorhynchus mykiss) (OECD 203)
	0.9 mg/l (Brachydanio rerio) (OECD 203)

12.2 Persistence and bio-degradability: Data not available.

12.3 Bio-accumulation potential: Data not available.

12.4 Mobility in the soil: Data not available.

Additional ecological information:

General notes: Do not dispose into the sewerage or underground water.

12.5 Results of PBT and vPvB assessment

PBT: The mixture does not meet the criteria for classification as PBT.

vPvB: The mixture does not meet the criteria for classification as vPvB.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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European waste catalogue:

08 01 15*: aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

Directions for waste disposal:

Chemical-physical treatment: appropriate
Thermal treatment: appropriate
Biological treatment: not appropriate
Deposition: not appropriate

Uncleaned packaging:**Recommendation:**

15 01 10: packaging containing residues of or contaminated by dangerous substances

Recommended cleansing agents: Water, if necessary together with cleansing agents.

Consign empty tins/cans to the collection and recycling point.

14 Transport information

14.1 UN-Number

ADR, ADN, IMDG, IATA

Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA

Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

Void

14.4 Packing group

ADR, IMDG, IATA

Void

14.5 Environmental hazards:**Marine pollutant:**

No

14.6 Special precautions for user

Not applicable.

**14.7 Transport in bulk according to Annex II
of MARPOL73/78 and the IBC Code**

Delivery takes place only in suitable packaging approved under traffic laws.

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**Biocides:**

55406-53-6 3-Iodo-2-propynylbutylcarbamate

0.05%

National regulations -

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Information concerning VOC Directive 1999/13/EG:

VOC-value of EU (European Union): 65.3 g/l

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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Complete wording of the hazard (H) warning given in the safety data sheet and R-phrases:

- | | |
|-----------|--|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| R11 | Highly flammable. |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R35 | Causes severe burns. |
| R36 | Irritating to eyes. |
| R43 | May cause sensitisation by skin contact. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

Department issuing MSDS: Central technical department

Contact: tel: +43 5242 6922-713

* **Data compared to the previous version altered.**

Note concerning the lower explosion limit of water-thinnable varnishes:

See PTB research report PEx5 200500185, Physical-Technical Federal agency Braunschweig, september 2005 and report PTB-W-57, february 1994.