



Safety Data Sheet according to (EC) No 1907/2006 as amended

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V001.8

Ponal Duo Resin

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Ponal Duo Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use:

Wood adhesive, reaction

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

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For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.com.

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

Further information is available at Poison Control Centers.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Following substances are present in a concentration $\geq 0,1\%$ and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration \geq the concentration limit that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M-factors and ATEs	Add. Information
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5 500-035-6 500-035-6 01-2119471485-32	1- < 5 %	Eye Irrit. 2, H319		

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of adverse health effects seek medical advice.

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact:

Rinse immediately with plenty of running water, seek medical advice if necessary.

Ingestion:

Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

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

Wear protective equipment.

Danger of slipping on spilled product.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove mechanically.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

No particular measures required.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.

Store frost-free.

Temperatures between + 5 °C and + 40 °C

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

Wood adhesive, reaction

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Calcium carbonate 471-34-1		10	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Calcium carbonate 471-34-1		1,25	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Calcium carbonate 471-34-1			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Calcium carbonate 471-34-1		10	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Calcium carbonate 471-34-1		1,25	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	aqua (freshwater)		0,085 mg/l				
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	aqua (marine water)		0,0085 mg/l				
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	aqua (intermittent releases)		1,51 mg/l				
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	sewage treatment plant (STP)		70 mg/l				
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	sediment (freshwater)				0,193 mg/kg		
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	sediment (marine water)				0,0193 mg/kg		
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	Soil				0,0183 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	Workers	Inhalation	Long term exposure - systemic effects		98 mg/m3	
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	General population	dermal	Long term exposure - systemic effects		8,3 mg/kg	
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	General population	Inhalation	Long term exposure - systemic effects		29 mg/m3	
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	General population	oral	Long term exposure - systemic effects		8,3 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

Combination filter: ABEKP (EN 14387)

This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374.

Perforation time > 30 minutes

material thickness > 0.4 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection:

Goggles which can be tightly sealed.

Protective eye equipment should conform to EN166.

Skin protection:

Suitable protective clothing

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.

Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	liquid
Delivery form	liquid
Colour	white
Odor	little intrinsic odour

pH	Not applicable
Viscosity, dynamic (Haake; 20 °C (68 °F))	60.000 - 90.000 mPa.s no method
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially miscible
Density (23 °C (73.4 °F))	1,32 - 1,36 g/cm ³ no method

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with acids: production of heat and carbon dioxide.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:

No data available.

Respiratory or skin sensitization:

No data available.

Germ cell mutagenicity:

No data available.

Carcinogenicity

No data available.

Reproductive toxicity:

No data available.

STOT-single exposure:

No data available.

STOT-repeated exposure::

No data available.

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	LC50	4.600 mg/l	96 h	Leuciscus idus	DIN 38412-15

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	EC50	> 100 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	NOEC	>= 10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	EC50	150,67 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	NOEC	4,25 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	NOEC	700 mg/l	3 h	activated sludge	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	not readily biodegradable.	aerobic	9 %	28 d	EU Method C.4-D (Determination of the "Ready" Biodegradability/Manometric Respirometry Test)
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	not inherently biodegradable	aerobic	36 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	0,3 - 1,6		EU Method A.8 (Partition Coefficient)

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
1,2-Ethanediamine, polymer with methyloxirane > 1 - < 5,5 mol PO 25214-63-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

080410

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK:	WGK 1: slightly hazardous to water (Ordinance on facilities for handling substances that are hazardous to water (AwSV)) Classification according to AwSV, Annex 1 (5.2)
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Storage class according to TRGS 510:	10
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SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H319 Causes serious eye irritation.

ED:	Substance identified as having endocrine disrupting properties
EU OEL:	Substance with a Union workplace exposure limit
EU EXPLD 1:	Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2	Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC:	Substance of very high concern (REACH Candidate List)
PBT:	Substance fulfilling persistent, bioaccumulative and toxic criteria
PBT/vPvB:	Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria
vPvB:	Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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