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

1.1 Product identifier

Commercial product name:	HinriPoly
Utilization of the substance of the formulation:	Polyol for Polyurethanes

1.2 Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:	ERNST HINRICHS Dental GmbH
Street / mailbox:	Borsigstr. 1
Country code. / postal code / city:	D - 38644 Goslar
Phone:	0 53 21 / 5 06 24
Fax:	0 53 21 / 5 08 81
E-mail / Website:	info@hinrichs-dental.de / www.hinrichs-dental.de
Further information obtainable from:	ERNST HINRICHS Dental GmbH

1.4 Emergency telephone number

ERNST HINRICHS Dental GmbH:	+49 (0) 53 21 / 5 06 24 (Mon-Fri. 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

GHS09

Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

GHS07

Eye Irrit. 2.	H319	Causes serious eye irritation

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

Hazard pictograms:

GHS07

GHS09

Signal word: Warning

Hazard statements:

H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear eye protection / face protection.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulations

Other hazards:
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:		
CAS: 102-60-3 EINECS: 203-041-4	1,1',1",1'"-ethylenedinitrilotetrapropan-2-ol  Eye Irrit. 2, H319	25-50%
CAS: 25322-69-4	Polypropylenglykol  Acute Tox. 4, H302	10-25%
CAS: 38640-62-9 EINECS: 254-052-6	alkylated aromatic hydrocarbon  Asp. Tox. 1, H304;  Aquatic Chronic 1, H410	≥10-<25%
EC number: 918-973-3	Hydrocarbons, C13-C16, isoalkanes, cycloalkanes, <2% aromatics  Asp. Tox. 1, H304	1-2.5%
CAS: 64742-47-8 EC number: 921-050-8	Distillates (petroleum), hydrotreated light  Asp. Tox. 1, H304	1-2.5%
EC number: 920-107-4	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, Cyclenes, < 2% Aromatics  Asp. Tox. 1, H304	1-2.5%

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

After eye contact:	Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing:	Do not induce vomiting; call for medical help immediately. If swallowed, rinse mouth with water (only if the person is conscious). A person vomiting while laying on their back should be turned onto their side. Seek immediate medical advice.
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.	No further relevant information available.

SECTION 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	In case of fire, the following can be released: Carbon monoxide (CO), carbon dioxide
5.3 Advice for firefighters	
Protective equipment:	Wear fully protective suit. Wear self-contained respiratory protective device.
Additional information	Cool endangered receptacles with water spray. Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Particular danger of slipping on leaked/spilled product. Wear protective equipment. Keep unprotected persons away. Keep away from ignition sources. Ensure adequate ventilation
6.2 Environmental precautions:	Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into watercourse or sewage system.
6.3 Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
6.4 Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Inform personnel of the affiliated with the product hazards and risks: Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection:

Protect from heat.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Keep container tightly closed and dry and storage in a good ventilated room.

Storage temperature:

20 - 25 °C.

Information about storage in one common storage facility:

Store away from reducing agents.
Do not store together with oxidising and acidic materials.
Store away from foodstuffs.

Further information about storage conditions:

Protect from humidity and water.
Store in dry conditions.
Protect from frost.
This product is hygroscopic.

Storage class:

10

7.3 Denomination of Origin:

Made in Germany

Processing information:

Homogenize content before use

General remark:

For processing instructions see data sheet

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs		
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol		
Oral	DNEL Long-term - systemic effects	2.5 mg/kg (General population)
Dermal	DNEL Long-term - systemic effects	2.5 mg/kg (General population) 4.2 mg/kg (workers)
Inhalative	DNEL Long-term - systemic effects	8.7 mg/m³ (General population) 29.4 mg/m³ (workers)
38640-62-9 alkylated aromatic hydrocarbon		
Oral	DNEL Long-term	2.1 mg/kg bw/day (General population)
Dermal	DNEL Long-term	2.1 mg/kg bw/day (General population) 4.3 mg/kg bw/day (workers)
Inhalative	DNEL Long-term	7.4 mg/m³ (General population) 30 mg/m³ (workers)

PNECs		
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol		
	PNEC STP PNEC sediment PNEC soil PNEC	70 mg/L (sewage plant) 0.0193 mg/kg (marine water) 0.193 mg/kg (freshwater- sediment) 0.0183 mg/kg (soil (Boden)) 0.085 mg/l (freshwater) 0.0085 mg/l (marine water) 1.51 mg/l (intermittent releases)
38640-62-9 alkylated aromatic hydrocarbon		
Oral	PNEC PNEC STP PNEC aqua PNEC sediment PNEC soil	25 mg/kg (food) 0.15 mg/L (sewage plant) 0.236 ug/L (freshwater) 0.0236 ug/L (marine water) 0.853 mg/kg (freshwater) 0.085 mg/kg (marine water) 0.19 mg/kg (soil (Boden))

Additional information: The lists valid during the making were used as basis

8.2 Exposure controls

Appropriate engineering controls: No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not necessary if room is well-ventilated.

Hand protection: Preventive skin protection (3-point program) required
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests, no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 preparation of several substances, the resistance of the glove material can´t calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material::	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Suitable materials for protective gloves, EN 374-3: Polychloroprene - CR: thickness> = 0.5 mm, breakthrough time> = 480 min. NBR - NBR: thickness> = 0,35mm, Breakthrough time> = 480 min. Butyl rubber - IIR: thickness> = 0.5 mm, breakthrough time> = 480 min. Fluorine rubber - FKM: thickness> = 0.4 mm; breakthrough time> = 480 min. Recommendation: Dispose of contaminated gloves.
Eye protection:	Goggles recommended during refilling
Body protection:	Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Appearance:	
Colour:	Whitish
Odour	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range:	238 °C
Flammability:	Not applicable.
Lower and upper explosion limit:	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	105 °C
Auto-ignition temperature:	290 °C
Decomposition temperature:	Not determined.
pH:	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic at 20 °C:	100 mPas
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density:	
Density at 20 °C:	1.02 g/cm³
Relative density:	Not determined.
Vapour density:	Not determined.

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	

Organic solvents:	10.1 %
VOC (EC):	44.1 g/l
Change in condition	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Aerosols	Void
Oxidising gases:	Void
Gases under pressure:	Void
Flammable liquids:	Void
Flammable solids:	Void
Self-reactive substances and mixtures:	Void
Pyrophoric liquids:	Void
Pyrophoric solids:	Void
Self-heating substances and mixtures:	Void
Substances and mixtures, which emit flammable gases in contact with water:	Void
Oxidising liquids:	Void
Oxidising solids	Void
Organic peroxides:	Void
Corrosive to metals:	Void
Desensitised explosives:	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: Reacts with reducing agents. Reacts with oxidising agents. Reacts with inorganic acid chlorides.
No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: Incompatible with oxidizing agents, acids

10.6 Hazardous decomposition products: If handled accordingly no products of decomposition.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification		
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol		
Oral	LD50	>2,000-<5,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402 Acute Dermal Toxicity)
25322-69-4 Polypropylenglykol		
Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
38640-62-9 alkylated aromatic hydrocarbon		

Oral	LD50	>4,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
	NOAEL	~170 mg/kg (rat)
Dermal	LD50	>4,000 mg/kg (rat) (OECD 402 Acute Dermal Toxicity)
Inhalative	LC50/4 h	>5.6 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)
Kohlenwasserstoffe, C13-C16, Isoalkane, Cycloalkane, <2% Aromaten		
Oral	LD50	5,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	2,000 mg/kg (rabbit) (OECD 402 Acute Dermal Toxicity)
Inhalative	LC50/4 h	5 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)
64742-47-8 Distillates (petroleum), hydrotreated light		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Kohlenwasserstoffe, C12-C15, n-Alkane, Isoalkane, Cyclene, < 2% Aromaten		
Oral	LD50	>5,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>4,951 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)

Skin corrosion/irritation Slightly irritating (OECD method 404), does not require labelling.

Serious eye damage/irritation Slightly irritant, labelling not required (analogy conclusion).

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties: None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	
LC50 (96 h)	>100 mg/l (Leuciscus)
EC50 (48 h)	>100 mg/l (Daphnia Magna)
EC50 (72 h)	>100 mg/l (Desmodesmus subspicatus)
EC20 (0,5h)	>1,000 mg/l (activated sludge)
25322-69-4 Polypropylenglykol	
LC50 (96 h)	>100 mg/l (Oncorhynchus mykiss)
EC50 (48 h)	>100 mg/l (Daphnia Magna)
ErC50 (72h)	>100 mg/l (Scenedesmus subspicatus)

38640-62-9 alkylated aromatic hydrocarbon	
LC0(96h)	0.5 mg/l (fish)
EC0 (48h)	0.16 mg/l (D)
LL50 (48h)	1.7 mg/L (D)
EC0 (72h)	0.15 mg/l (A)
NOEC / 21d	0.013 mg/l (D) (OECD 202 Daphnia sp. Acute Immobilisation Test)
Kohlenwasserstoffe, C13-C16, Isoalkane, Cycloalkane, <2% Aromaten	
EL50 (72h)	>1,000 mg/l (A) (OECD 201 Alga, Growth Inhibition Test)
EL50 (48h)	>1,000 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)
LL50(96h)	>1,000 mg/l (F) (OECD 203 Fish, Acute Toxicity Test)

12.2 Persistence and degradability No further relevant information available

Other information: Elimination by adsorption onto activated sludge.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

12.6 Endocrine disrupting properties: The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects
Additional ecological information:
General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
Recommendation: Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate waste code according to the European Waste Catalogue (EWC) should be used.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue	
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information *

14.1 UN-Number
ADR, IMDG, IATA: UN3082

14.2 UN proper shipping name

ADR:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon, Naphtha (petroleum), hydrodesulfurized heavy)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon, Naphtha (petroleum), hydrodesulfurized heavy) , MARINE POLLUTANT
IATA:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon, Naphtha (petroleum), hydrodesulfurized heavy)

14.3 Transport hazard class(es)

ADR

Class:	9 (M6) Miscellaneous dangerous substances and articles.
Label:	9

IMDG

Class:	9 Miscellaneous dangerous substances and articles.
Label:	9

14.4 Packing group

ADR, IMDG, IATA:	III

14.5 Environmental hazards:

Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)

14.6 Special precautions for user: Warning: Miscellaneous dangerous substances and articles.

Hazard identification number (Kemler code):	90
EMS Number:	F-A,S-F
Stowage Category	A

14.7 Maritime transport in bulk according to IMO instruments: Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ):	*5L*
Excepted quantities (EQ):	Code: E1 Maximum net quantity per inner packaging: 30 ml

	Maximum net quantity per outer packaging: 1000 ml
Transport category:	3
Tunnel restriction code:	(-)
IMDG	
Limited quantities (LQ):	5L
Excepted quantities (EQ):	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYLATED AROMATIC HYDROCARBON, NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY), 9, III

SECTION 15: Regulatory information

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

Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07

GHS09

Signal word: Warning

Hazard statements:

H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulations.

Directive 2012/18/EU:
Named dangerous substances - ANNEX I: None of the ingredients is listed.

Seveso category E2: Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in None of the ingredients is listed.

electrical and electronic equipment – Annex II:

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)):	None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS:	None of the ingredients is listed.
Regulation (EC) No 273/2004 on drug precursors:	None of the ingredients is listed.
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors:	None of the ingredients is listed.

National regulations:

Technical instructions (air):

Class	Share in %
NK	1-2.5

Water hazard class: Water hazard class 1 (VwVwS 17.05.99): slightly hazardous for water

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

SECTION 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.

Relevant phrases

H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.

The information in this safety data sheet corresponds to the best of our knowledge at the time of the revision. The information should give you clues for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product mentioned in this safety data sheet is mixed with other materials, mixed or processed, or subjected to processing, the information in this safety data sheet, unless expressly stated otherwise, cannot be transferred to the new material produced in this way.
UFI code is valid in:
Germany
Spain
Romania
France
Austria
Hungary
Czech Republic
Italy
Greece

Lithuania

Date of previous version: 29.11.2021

Version number of previous version: 27

Abbreviations and acronyms:

RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO:	International Civil Aviation Organisation
ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
VOC:	Volatile Organic Compounds (USA, EU)
DNEL:	Derived No-Effect Level (REACH)
PNEC:	Predicted No-Effect Concentration (REACH)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
PBT:	Persistent, Bioaccumulative and Toxic
vPvB:	very Persistent and very Bioaccumulative
Acute Tox. 4:	Acute toxicity, Hazard Category 4
Eye Irrit. 2:	Serious eye damage/eye irritation, Hazard Category 2
Asp. Tox. 1:	Aspiration hazard, Hazard Category 1
Aquatic Chronic 1:	Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2:	Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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