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

1.1 Product identifier

Trade name

V9500 Hardener

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

Relevant identified uses of the substance or mixture
Hardener

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Hellermann Tyton GmbH & Co. KG
Großer Moorweg 45
25436 Tornesch

Telephone no. +49 4122 701-1
e-mail substance.legalcompliance@hellermanntyton.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Acute 1; H400
Aquatic Chronic 1; H410
Eye Irrit. 2; H319
Skin Irrit. 2; H315
Skin Sens. 1; H317
STOT SE 3; H336

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

GHS07

GHS09

Signal word
Warning

Hazardous component(s) to be indicated on label:
Reaction product of Fatty acids, C18-unstaturated, dimer with 4,7,10-trioxa-1,13-tridecane-diamine

Hazard statement(s)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PBT assessment
The mixture does not contain any substance identified as PBT.

vPvB assessment
The mixture does not contain any substance identified as vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**Reaction product of Fatty acids, C18-unstaturated, dimer with 4,7,10-trioxa-1,13-tridecane-diamine**			
	- 701-270-9 - -	Skin Irrit. 2; H315 Skin Sens. 1A; H317 Eye Irrit. 2; H319 STOT SE 3; H336 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 50.00 - < 70.00	wt%
2	**Kaolin**			
	1332-58-7 310-194-1 - -	-	>= 30.00 - < 50.00	wt%
3	**titanium dioxide**			
	13463-67-7 236-675-5 - -	-	< 1.00	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. If unconscious place in recovery position and seek medical advice.

After skin contact
When in contact with the skin, clean with soap and water.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Alcohol-resistant foam; Dry chemical extinguisher; Carbon dioxide (CO2)

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon oxides (COx); Nitrogen oxides (NOx)

5.3 Advice for firefighters
Use self-contained breathing apparatus. Wear protective clothing. Run-off water from fire fighting must not be discharged into drains or enter surface water. Closed containers may rupture when exposed to extreme heat.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion
Keep away from ignition sources and provide for good ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Substances to be avoided, see section 10.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	**Kaolin**	**1332-58-7**	**310-194-1**
	List of approved workplace exposure limits (WELs) / EH40		
	Kaolin		
	respirable dust		
	WEL long-term (8-hr TWA reference period)	2 mg/m³	

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
paste

Colour
grey

Odour
amine-like

pH value
No data available

Boiling point / boiling range			
Value	>=	152	°C
Source	supplier		

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value	>=	151	°C
Method	closed cup		
Source	supplier		

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density			
Value	1.24	-	1.32
Source	supplier		

Density
No data available

Solubility in water	
Comments	insoluble in water

Solubility
No data available

Partition coefficient n-octanol/water (log value)
No data available

Kinematic viscosity

No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

strong oxidizing agents; strong acids

10.6 Hazardous decomposition products

None, if handled according to intended use. In case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute oral toxicity
No data available

Acute dermal toxicity
No data available

Acute inhalational toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Reproduction toxicity
No data available

Carcinogenicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

Endocrine disrupting properties
No data available

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)
No data available

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
V9500 Hardener	
PBT assessment	The mixture does not contain any substance identified as PBT.
vPvB assessment	The mixture does not contain any substance identified as vPvB.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not discharge into drains or waters and do not dispose of in public landfills.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN3082
IMDG	UN3082
ICAO-TI / IATA	UN3082

14.2 UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	Reaction product of Fatty acids, C18-unstaturated, dimer with 4,7,10-trioxa-1,13-tridecane-diamine
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	Reaction product of Fatty acids, C18-unstaturated, dimer with 4,7,10-trioxa-1,13-tridecane-diamine
ICAO-TI / IATA	Environmentally hazardous substance, liquid, n.o.s.
Technical name	Reaction product of Fatty acids, C18-unstaturated, dimer with 4,7,10-trioxa-1,13-tridecane-diamine

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	9
Label	9
Classification code	M6
Tunnel restriction code	-
Hazard identification no.	90
IMDG - Class	9
Label	9
ICAO-TI / IATA - Class	9
Label	9

14.4 Packing group

ADR/RID/ADN	III
IMDG	III
ICAO-TI / IATA	III

14.5 Environmental hazards

ADR/RID/ADN	Symbol "fish and tree"
IMDG	Symbol "fish and tree"
EmS	F-A, S-F
ICAO-TI / IATA	Symbol "fish and tree"

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**titanium dioxide**	**13463-67-7**	**236-675-5**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E1

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)
H400 Very toxic to aquatic life.

Creation of the safety data sheet
UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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Prod-ID 780802

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

1.1 Product identifier

Trade name

V9500 Resin

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

Relevant identified uses of the substance or mixture
Glue

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Hellermann Tyton GmbH & Co. KG
Großer Moorweg 45
25436 Tornesch

Telephone no. +49 4122 701-1
e-mail substance.legalcompliance@hellermanntyton.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 2; H411
Eye Irrit. 2; H319
Skin Irrit. 2; H315
Skin Sens. 1; H317

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

GHS07

GHS09

Signal word
Warning

Hazardous component(s) to be indicated on label:
bis-[4-(2,3-epoxipropoxi)phenyl]propane

Hazard statement(s)
H315 Causes skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Hazard statements (EU)

EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PBT assessment
The mixture does not contain any substance identified as PBT.

vPvB assessment
The mixture does not contain any substance identified as vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**		**pls. refer to footnote (2)**	
	1675-54-3 216-823-5 603-073-00-2 01-2119456619-26	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 50.00 - < 70.00	wt%
2	**Kaolin**			
	1332-58-7 310-194-1 - -	-	>= 10.00 - < 30.00	wt%
3	**Silane, dichlorodimethyl-, reaction products with silica**			
	68611-44-9 271-893-4 - -	-	< 5.00	wt%
4	**CARBON BLACK**			
	1333-86-4 215-609-9 - 01-2119384822-32	-	< 1.00	wt%
5	**titanium dioxide**			
	13463-67-7 236-675-5 - -	-	< 1.00	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

(2) According to the latest state of knowledge and applying the criteria set out in annex I to Regulation (EC) No 1272/2008 , the aforementioned classification is required. This classification goes beyond the classification set out in table 3, Annex VI to Regulation (CE) No 1272/2008.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Skin Irrit. 2; H315: C >= 5% Eye Irrit. 2; H319: C >= 5%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact
When in contact with the skin, clean with soap and water.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Alcohol-resistant foam; Dry chemical extinguisher; Carbon dioxide (CO2)

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Aldehydes; Carbon oxides (COx)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Run-off water from fire fighting must not be discharged into drains or enter surface water. Closed containers may rupture when exposed to extreme heat.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion

Keep away from ignition sources and provide for good ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	**Kaolin**	**1332-58-7**	**310-194-1**
	List of approved workplace exposure limits (WELs) / EH40		
	Kaolin		
	respirable dust		
	WEL long-term (8-hr TWA reference period)	2 mg/m³	

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**			**1675-54-3** **216-823-5**	
	dermal	Long term (chronic)	systemic	0.75	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	4.93	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no
	Route of exposure	**Exposure time**	**Effect**	**Value**

1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**			**1675-54-3** **216-823-5**	
	oral	Long term (chronic)	systemic	0.5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	89.3	µg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.87	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**		**1675-54-3** **216-823-5**	
	water	fresh water	0.006	mg/L
	water	marine water	0.001	mg/L
	water	fresh water sediment	0.341	mg/kg dry weight
	water	marine water sediment	0.034	mg/kg dry weight
	soil	-	0.065	mg/kg dry weight
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	11	mg/kg food

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
paste

Colour
black

Odour
characteristic

pH value
No data available

Boiling point / boiling range			
Value	>=	200	°C
Source	supplier		

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value	>=	150	°C
Source	supplier		

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density		
Value		1.27
Source	supplier	

Density
No data available

Solubility in water	
Comments	insoluble in water

Solubility
No data available

Partition coefficient n-octanol/water (log value)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**	
log Pow	2.64	-	3.78		
Reference temperature			25		°C
with reference to	pH 7				
Method	OECD 117				
Source	ECHA				

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
None, if handled according to intended use.

10.5 Incompatible materials
strong oxidizing agents; strong acids

10.6 Hazardous decomposition products
None, if handled according to intended use. In case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
LD50	> 2000 mg/kg bodyweight		
Species	rat		
Method	OECD 420		
Source	ECHA		

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
LD50	> 2000 mg/kg bodyweight		
Species	rat		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity
No data available

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	low-irritant		
Evaluation/classification	The classification is according to the current version of the harmonized classification found in Annex VI of Regulation EC 1272/2008.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	The classification is according to the current version of the harmonized classification found in Annex VI of Regulation EC 1272/2008.		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	sensitizing		
Evaluation/classification	Based on available data, the classification criteria are met.		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium / Escherichia coli		
Method	OECD 472		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	In vivo mammalian germ cells - chromosome effects		
Species	mouse		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	in vivo mammalian germ cell study: gene mutation		
Species	rat		
Method	OECD 488		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Route of exposure	oral		
Type of examination	Two-Generation Reproduction Toxicity Study		
Species	rat		
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	Prenatal Developmental Toxicity Study		
Species	rabbit		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Route of exposure	oral		
Type of examination	Toxicity study		
Species	rat		
Method	OECD 453		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Route of exposure	oral		

Species	rat
Method	OECD 408
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Route of exposure	dermal
Species	mouse
Method	OECD 411
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Aspiration hazard
No data available

Endocrine disrupting properties
No data available

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

LC50		1.5	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

EC50	1.1 -	2.8	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

NOEC		0.3	mg/l
Duration of exposure		21	day(s)
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

EC50		9.1	mg/l
Duration of exposure		72	h
Species	Scenedesmus capricornutum		
Method	EPA-660/3-75-009		
Source	ECHA		

Toxicity to algae (chronic)

No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Type	aerobic biodegradation		
Value		5	%
Duration		28	day(s)
Method	OECD 301 F		
Source	ECHA		
Evaluation	not readily degradable		

Abiotic Degration			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Type	Hydrolysis		
Half-life		86	h
pH value		7	
Reference temperature		25	°C
Method	OECD 111		
Source	ECHA		

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
log Pow	2.64 -	3.78	
Reference temperature		25	°C
with reference to	pH 7		
Method	OECD 117		
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
V9500 Resin	
PBT assessment	The mixture does not contain any substance identified as PBT.
vPvB assessment	The mixture does not contain any substance identified as vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge into drains or waters and do not dispose of in public landfills.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN3082
IMDG	UN3082
ICAO-TI / IATA	UN3082

14.2 UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane
ICAO-TI / IATA	Environmentally hazardous substance, liquid, n.o.s.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	9
Label	9
Classification code	M6
Tunnel restriction code	-
Hazard identification no.	90
IMDG - Class	9
Label	9
ICAO-TI / IATA - Class	9
Label	9

14.4 Packing group

ADR/RID/ADN	III
IMDG	III
ICAO-TI / IATA	III

14.5 Environmental hazards

ADR/RID/ADN	Symbol "fish and tree"
IMDG	Symbol "fish and tree"
EmS	F-A, S-F
ICAO-TI / IATA	Symbol "fish and tree"

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	

No	Substance name	CAS no.	EC no.	No
1	bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	216-823-5	75
2	CARBON BLACK	1333-86-4	215-609-9	75
3	titanium dioxide	13463-67-7	236-675-5	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Creation of the safety data sheet
UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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