

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH)

Printing date: 21.12.2017 Version number: 1.3 Revision: 26.10.2017 Trade name: Urethane Hardener 80

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



GHS09

Signal word

Warning

Hazard Statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

- P102 Keep out of reach of children.
- P273 Avoid release to the environment.
- P391 Collect spillage.
- P501 Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

Information pertaining to special dangers for human and environment

Very toxic to aquatic organisms , may cause long-term harmful effects in the aquatic environment.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Description

Preparation of different active substances

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
38640-62-9	254-052-6	Bis(isopropyl)naphthalene	25 - 50	Asp. Tox. 1, H304 / Aquatic Chronic 1, H410
106246-33-7	402-130-7	4,4'-Methylenebis(3-chloro-2,6-diethylaniline)	25 - 50	Aquatic Chronic 4, H413

REACH

CAS No	Name	REACH registration number
38640-62-9	Bis(isopropyl)naphthalene	01-2119565150-48-0000
106246-33-7	4,4'-Methylenebis(3-chloro-2,6-diethylaniline)	01-0000015192-78-0004



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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.
In the event of symptoms refresh air and keep him immobile.

In case of skin contact

In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

Do not induce vomiting.
Call for a doctor immediately.
Rinse out mouth and give plenty of water to drink.

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

No information available.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

! Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

Ammonia
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.
Do not inhale explosion and/or combustion gases.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
Collect contaminated firefighting water separately, must not be discharged into the drains.



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!SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.
Use personal protective clothing.
Keep away sources of ignition.
Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.
Do not discharge into the drains/surface waters/groundwater.
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).
After taking up the material dispose according to regulation.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

!SECTION 7: Handling and storage

7.1. Precautions for safe handling

! Advice on safe handling

Avoid formation of aerosols.
Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Do not inhale vapours.
Avoid contact with eyes and skin

Hygiene measures

At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.
Work in rooms with good ventilation.
Wash hands before breaks and after work.

Advice on protection against fire and explosion

Pay attention to general rules of internal fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Advice on storage compatibility

Do not store with acids or alkalies.
Do not store with oxidizing agents.
Do not store together with animal feedstuffs.
Do not store together with food.

Further information on storage conditions

Keep container tightly closed and store at cool and aired place
Protect from frost.
Protect from heat and direct solar radiation.
Store in a dry place.



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7.3. Specific end use(s)
Recommendation(s) for intended use
See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL-/PNEC-values

DNEL worker

CAS No	Substance name	Value	Code	Remark
38640-62-9	Bis(isopropyl)naphthalene	30 mg/m ³		DNEL long-term inhalative (systemic)
		4,3 mg/kg bw/day		DNEL long-term dermal (systemic)

PNEC

CAS No	Substance name	Value	Code	Remark
38640-62-9	Bis(isopropyl)naphthalene	0,26 µg/l		PNEC aquatic, freshwater
		0,094 mg/kg		PNEC sediment, marine water
		0,94 mg/kg		PNEC sediment, freshwater
		0,15 mg/l		PNEC sewage treatment plant (STP)
		0,026 µg/l		PNEC aquatic, marine water

Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls

Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Short term: filter apparatus, filter A

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber; 0,4mm; 480min; 60min.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Sufficient ventilation and exhaustion.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

liquid

Colour

yellowish

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	> 250 °C			DIN 53171	
melting point	not determined				
Flash point	> 100 °C			closed cup	
Vapourisation rate	not determined				
Flammable (solid)	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	365 °C			DIN 51794	
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	0,4 Vol-%				
Upper explosion limit	4,7 Vol-%				
Vapour pressure	not determined				
Relative density	1 g/cm ³	20 °C		ISO 2811	
Vapour density	not determined				
Solubility in water					No or low immiscibility
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	200 mPa*s	25 °C		ISO 9371	
Viscosity kinematic	not determined				
Solvent content	0,7 %				
Solids content	28,2 %				



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Oxidising properties

No information available.

Explosive properties

no

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reactions with strong acids.

Exothermic reaction with hardener component.

Reactions with strong alkalis and oxidising agents.

Violent reactions with concentrated alkalis and oxidising agents.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

! Substances to avoid

Alkali (lye), concentrated

Isocyanate

Acid, concentrated

Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Nitrous oxides (NO_x)

Ammonia

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 4000 mg/kg	rat		CAS: 38640-62-9
LD50 acute dermal	> 2000 mg/kg	rat	OECD 402	CAS: 106246-33-7
LC50 acute inhalation	> 5,6 mg/l (4 h)	rat	OECD 403	CAS: 38640-62-9



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	Value/Validation	Species	Method	Remark
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	low irritant - no labeling duty			
Skin sensitization	non-sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.
Reproduction-Toxicity				No indications of toxic effects were observed in reproduction studies in animals.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

Experiences made from practice

Frequent contact specially if dried out may cause skin and eye irritations.

! Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

The product has not been tested. The information is derived from the properties of the individual components.

!SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 > 1 mg/l (96 h)	guppy	OECD 203	CAS: 106246-33-7
Daphnia	EC 50 > 0,1 mg/l (48 h)	Daphnia magna	OECD 202	CAS: 106246-33-7
Algae	EC0 0,15 mg/l (72 h)	Green algae	OECD 201	CAS: 38640-62-9
Bacteria	EC0 > 10 mg/l (3 h)	activated sludge	OECD 209	CAS: 106246-33-7

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



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12.6. Other adverse effects

! General regulation

Very toxic to aquatic life with long lasting effects.
Even in the event of low quantities penetration into the underground drinking water is contaminated.
Toxic to fishes.
Do not allow uncontrolled leakage of product into the environment.
Product is not allowed to be discharged into the ground water or aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

Remove in accordance with local official regulations.
Dispose of as hazardous waste.

Recommendations for packaging

Dispose of according to the local waste regulations.

General information

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3082	3082	3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (Bis(isopropyl)naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(isopropyl)naphthalene)	Environmentally hazardous substance, liquid, n.o.s. (Bis(isopropyl)naphthalene)
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Land and inland navigation transport ADR/RID

Hazard label(s) 9
tunnel restriction code E
Classification code M6

Marine transport IMDG

MARINE POLLUTANT



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!SECTION 15: Regulatory information

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

! VOC standard

VOC content	0,6 %
VOC value	6 g/L

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

!SECTION 16: Other information

! Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

For industrial use only.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 1.2

H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.