AH42 Hydraulic Anaerobic Pipe Sealant

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 01-005-505
Issue date: 25/05/2010 Revision date: 07/02/2022 Supersedes version of: 24/05/2020 Version: 8.0

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

1.1. Product identifier

Product form : Mixture
Product name : AH42 Hydraulic Anaerobic Pipe Sealant
Product code : AH42
Type of product : adhesives
Product group : Blend

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Adhesives, sealants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Chemence Ltd
13 Princewood Road,
Corby,
Northamptonshire NN17 4XD
United Kingdom

Tel: +44 (0)1536 402600
Faxl: +44 (0)1536 400266

email:technical@chemence.com

1.4. Emergency telephone number

Emergency number : +44 (0)1536 402600 (Monday - Friday 8:00 to 17:30)
UK Only - IN CASE OF TOXIC OR TRANSPORT EMERGENCY:
National Chemical Emergency Centre: Telephone 01865 407333

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07 GHS09

Signal word (CLP) : Danger

Contains : Triethyleneglycol Dimethacrylate, α, α-dimethylbenzyl hydroperoxide, Hydroxypropyl Methacrylate, Acrylic Acid, Reaction Mass Of 2,2'-[(4-Methylphenyl)Imino]Bisethanol And Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing vapours.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P273 - Avoid release to the environment.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Diisopropyl Naphthalene (38640-62-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Hydroxypropyl Methacrylate (27813-02-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Acrylic Acid	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triethyleneglycol Dimethacrylate	CAS-No.: 109-16-0 EC-No.: 203-652-6 REACH-no: 01-2119969287-21	≥ 30 – < 45	Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Diisopropyl Naphthalene	CAS-No.: 38640-62-9 EC-No.: 254-052-6 REACH-no: 01-2119565150-48	≥ 15 – < 30	Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydroxypropyl Methacrylate	CAS-No.: 27813-02-1 EC-No.: 248-666-3 REACH-no: 01-2119490226-37	≥ 3 – < 8	Eye Irrit. 2, H319 Skin Sens. 1, H317
α, α-dimethylbenzyl hydroperoxide	-	≥ 1 – < 3	Org. Perox. E, H242 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
Acrylic Acid substance with a Community workplace exposure limit	-	≥ 1 – < 3	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Aquatic Acute 1, H400
2'-Phenylacetohydrazide	CAS-No.: 114-83-0 EC-No.: 204-055-3 REACH-no: EXEMPT <1T	≥ 0.3 – < 1	Acute Tox. 3 (Oral), H301
Reaction Mass Of 2,2'-[(4-Methylphenyl)Imino]Bisethanol And Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	EC-No.: 911-490-9 REACH-no: 01-2119979579-10	≥ 0.3 – < 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
α, α-dimethylbenzyl hydroperoxide	-	(0 <C < 10) STOT SE 3, H335 (1 ≤C < 3) Eye Irrit. 2, H319 (3 ≤C < 10) Skin Irrit. 2, H315 (3 ≤C < 10) Eye Dam. 1, H318 (5 ≤C < 100) Org. Perox. E, H242 (10 ≤C ≤ 100) Skin Corr. 1B, H314
Acrylic Acid	-	(1 ≤C ≤ 100) STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open.

First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. Drink plenty of water. Get medical advice/attention.

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

Symptoms/effects : Causes serious eye damage. Skin sensitisation.

Symptoms/effects after inhalation : May cause shortness of breath, tightness of the chest, a sore throat and cough.

Symptoms/effects after skin contact : irritation (itching, redness, blistering). May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage. Direct contact may result in corneal injury. Splashes in the eyes can cause irritation and may even result in irreparable damage.

Symptoms/effects after ingestion : Causes irritation of the mouth and throat. Ingestion may cause nausea, vomiting and diarrhea.

Chronic symptoms : Repeated or prolonged skin contact can result in sensitisation in susceptible individuals.

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

Treat symptomatically. An eyewash station should be available on the premises.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide. Cool closed containers exposed to fire with water spray.

Unsuitable extinguishing media : high volume water jet or water based extinguishing media.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Hazardous polymerization may occur if exposure to fire conditions.

Explosion hazard : Prolonged exposure to fire may cause containers to rupture/explode.

Reactivity in case of fire : On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray.

Hazardous decomposition products in case of fire : Combustion products may include the following: carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO_2 etc.). irritating vapours may be released.

5.3. Advice for firefighters

Precautionary measures fire : Do not approach fire except upwind and only with proper skin and respiratory protection (supplied air only).

Firefighting instructions : Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes.

Protection during firefighting : Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it. Scoop absorbed substance into closing containers. See Section 13 for disposal information.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing fume, vapours. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Mark out the contaminated area with signs and prevent access to unauthorized personnel. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Cover spill with non combustible material, e.g.: sand/earth.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain the spilled material by bunding (product is hazardous for the environment).

Methods for cleaning up : Take up liquid spill into absorbent material. Place in an appropriate container and dispose of the contaminated material at a licensed site.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing fume, vapours. Avoid contact with skin and eyes. Ensure good ventilation of the work station. Protective gloves made of rubber. Neoprene/viton®. Do not wear protective gloves made from PVC as these absorb (meth)acrylates.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in tightly closed, leak-proof containers.

Storage conditions : Keep away from ignition sources. Keep cool. Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed. IMPORTANT - if stored in bulk, product must be kept in contact with air to aid stabilisation.

Incompatible products : Strong acids. Strong oxidizing agents. Alkali metals and their alloys. Copper and its alloys. Aluminium. free radical initiators.

Incompatible materials : Direct sunlight. Heat sources.

Heat and ignition sources : Hazardous polymerization may occur if exposed to high temperature.

Storage area : Store away from direct sunlight or other heat sources.

Packaging materials : Always store product in a container of the same material as original container.

7.3. Specific end use(s)

adhesives.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Acrylic Acid	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	30 mg/m³

Acrylic Acid	
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	60 mg/m³
WEL STEL (OEL STEL) [ppm]	20 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Avoid contact with skin and eyes. Remove contaminated clothing. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:
Gloves. Protective clothing.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves. Do not wear protective gloves made from PVC as these absorb (meth)acrylates.

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Reusable gloves	Nitrile rubber (NBR), Fluoroelastomer (FKM), Viton® II, Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.3		EN 374-2

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Reusable half mask	Type A - High-boiling (>65 °C) organic compounds, ABEK	If conc. in air > exposure limit	EN 140, EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	brown.
Appearance	:	Viscous.
Odour	:	Characteristic pungent odour.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	-88 °C
Boiling point	:	Not available
Flammability	:	Not applicable
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Not oxidising.
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	≈ 530 mm²/s (calculated value)
Viscosity, dynamic	:	556 cP Anton Paar cone and plate, controlled stress rheometer
Solubility	:	Soluble in acetone. Insoluble in water. Water: < 3 g/l
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0.1 mm Hg @20°C
Vapour pressure at 50 °C	:	Not available
Density	:	Not available
Relative density	:	≈ 1.05 ~1.05
Relative vapour density at 20 °C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Polymerisation can occur. in the absence of oxygen. Anaerobic product: Presence of air is important to keep formulatory inhibitors active to maintain product stability.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Alkali metals and their alloys. Copper and its alloys. Aluminium. free radical initiators.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, nitrogen oxides (NOx).

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Triethyleneglycol Dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg
LD50 dermal	> 2000 mg/kg

Diisopropyl Naphthalene (38640-62-9)	
LD50 oral rat	4130 mg/kg
LD50 oral	3400 mg/kg
LD50 dermal rat	> 4000 mg/kg
LC50 Inhalation - Rat	> 5.6 mg/l (OECD 403 method)

Hydroxypropyl Methacrylate (27813-02-1)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	7964 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male
LD50 dermal	> 5000 mg/kg

α, α-dimethylbenzyl hydroperoxide	
LD50 oral rat	382 mg/kg

Acrylic Acid	
LD50 oral rat	1000 – 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s))

Acrylic Acid	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

2'-Phenylacetohydrazide (114-83-0)	
LD50 oral	270 mg/kg bodyweight mouse

Reaction Mass Of 2,2'-[(4-Methylphenyl)Imino]Bisethanol And Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
LD50 oral rat	619 mg/kg
LD50 dermal	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Hydroxypropyl Methacrylate (27813-02-1)	
NOAEL (animal/male, F0/P)	300 mg/kg bodyweight
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight
NOAEL (animal/male, F1)	≥ 1000 mg/kg bodyweight
NOAEL (animal/female, F1)	≥ 1000 mg/kg bodyweight

STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Triethyleneglycol Dimethacrylate (109-16-0)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Hydroxypropyl Methacrylate (27813-02-1)	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

α, α-dimethylbenzyl hydroperoxide	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acrylic Acid	
NOAEL (oral, rat, 90 days)	40 – 375 mg/kg bodyweight/day

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

AH42 Hydraulic Anaerobic Pipe Sealant	
Viscosity, kinematic	≈ 530 mm²/s (calculated value)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : May cause an allergic skin reaction,Irritation: may cause irritation to the respiratory system

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

AH42 Hydraulic Anaerobic Pipe Sealant	
Additional information	Insoluble in water

Triethyleneglycol Dimethacrylate (109-16-0)	
LC50 - Fish [1]	16.4 mg/l
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	72.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	100 mg/l species: Daphnia magna Duration: '21 d'
NOEC (chronic)	32 mg/l species: Daphnia magna Duration: '21 d'

Diisopropyl Naphthalene (38640-62-9)	
LC50 - Fish [1]	≥ 2.44 mg/l
EC50 - Crustacea [1]	> 0.16 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	0.025 mg/l Species: Daphnia magna Duration: '21 d'
NOEC (chronic)	0.013 mg/l Species: Daphnia magna Duration: '21 d'
NOEC chronic crustacea	0.013 mg/l (OECD 202 method)

Hydroxypropyl Methacrylate (27813-02-1)	
LC50 - Fish [1]	> 493 mg/l DIN 38412: Pt1
EC50 - Crustacea [1]	> 143 mg/l species: Daphnia magna
EC50 72h - Algae [1]	> 97.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 97.2 mg/l OECD 201: 72 h Pseudokirchneriella subcapitata (Green Algae)
NOEC (chronic)	45.2 mg/l Species: Daphnia magna Duration: '21 d'
NOEC chronic crustacea	45.2 mg/l
NOEC chronic algae	97.2 mg/l

α, α-dimethylbenzyl hydroperoxide	
LC50 - Fish [1]	3.9 mg/l

Acrylic Acid	
LC50 - Fish [1]	27 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	95 mg/l Species: Daphnia magna
ErC50 algae	0.13 mg/l EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Weight of evidence, Nominal concentration
LOEC (chronic)	8.1 mg/l Species: Daphnia magna Duration: '21 d'

Reaction Mass Of 2,2'-[(4-Methylphenyl)Imino]Bisethanol And Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
LC50 - Fish [1]	> 100 mg/l
EC50 - Other aquatic organisms [1]	48 mg/l

12.2. Persistence and degradability

AH42 Hydraulic Anaerobic Pipe Sealant	
Persistence and degradability	Product has only a limited biodegradability in soil and water.

Triethyleneglycol Dimethacrylate (109-16-0)	
Persistence and degradability	Readily biodegradable.
Biodegradation	≈ 75 %

Diisopropyl Naphthalene (38640-62-9)	
Persistence and degradability	Not readily biodegradable in water.

Hydroxypropyl Methacrylate (27813-02-1)	
Persistence and degradability	> 80 % biodegradation.
Biodegradation	> 80 %

Acrylic Acid	
Persistence and degradability	Readily biodegradable in water. easily degradable in the soil.

2'-Phenylacetohydrazide (114-83-0)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

AH42 Hydraulic Anaerobic Pipe Sealant	
Bioaccumulative potential	Low bioaccumulation potential.

Triethyleneglycol Dimethacrylate (109-16-0)	
Bioaccumulative potential	No bioaccumulation potential.

Diisopropyl Naphthalene (38640-62-9)	
BCF - Fish [1]	770 – 6400 (OECD 305 method)
Partition coefficient n-octanol/water (Log Pow)	6.081 (calculated value)
Bioaccumulative potential	Bioaccumulation potential. BCF. > 5000.

Hydroxypropyl Methacrylate (27813-02-1)	
Partition coefficient n-octanol/water (Log Pow)	0.97 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow <4).

Acrylic Acid	
BCF - Fish [1]	3.162 (estimated value)
Partition coefficient n-octanol/water (Log Pow)	0.46 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low bioaccumulation potential. BCF. <500.

2'-Phenylacetohydrazide (114-83-0)	
Bioaccumulative potential	No bioaccumulation data available. Lack of data.

12.4. Mobility in soil

AH42 Hydraulic Anaerobic Pipe Sealant	
Ecology - soil	No specific data.
Additional information	The liquid is heavier than water. Insoluble in water. Not volatile

Triethyleneglycol Dimethacrylate (109-16-0)	
Ecology - soil	Product adsorbs onto the soil. The liquid is heavier than water. Not volatile.

Diisopropyl Naphthalene (38640-62-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.558 (log Koc, QSAR)
Ecology - soil	Potential for mobility in soil is slight.

Hydroxypropyl Methacrylate (27813-02-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (calculated value)

Acrylic Acid	
Surface tension	69.9 mN/m (20 °C, 1 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 – 2.14
Ecology - soil	Low potential for absorption in soil.

2'-Phenylacetohydrazide (114-83-0)	
Ecology - soil	No specific data.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Use suitable disposal containers. Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose of this material and its container at hazardous or special waste collection point.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applied : 375

ADR	IMDG	IATA	ADN	RID
These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.				
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene)	Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : Diisopropyl Naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene)
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene), 9, III	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : Diisopropyl Naphthalene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Diisopropyl Naphthalene), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.				
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions (ADR)	:	TP1, TP29
Tank code (ADR)	:	LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3

Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13
Hazard identification number (Kemler No.)	:	90
Orange plates	:	
Tunnel restriction code (ADR)	:	-
EAC code	:	•3Z

Transport by sea

Special provisions (IMDG)	:	274, 335, 969
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP01, P001
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP29
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-F
Stowage category (IMDG)	:	A

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	964
PCA max net quantity (IATA)	:	450L
CAO packing instructions (IATA)	:	964
CAO max net quantity (IATA)	:	450L
Special provisions (IATA)	:	A97, A158, A197, A215
ERG code (IATA)	:	9L

Inland waterway transport

Classification code (ADN)	:	M6
Special provisions (ADN)	:	274, 335, 375, 601
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	M6
Special provisions (RID)	:	274, 335, 375, 601
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Special packing provisions (RID)	:	PP1
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1, TP29
Tank codes for RID tanks (RID)	:	LGBV
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW13, CW31
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	90

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.
Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.
Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Supersedes version of	Added	
	Revision date	Modified	
	UN-No. (RID)	Added	
	Number of blue cones/lights (ADN)	Added	
	Equipment required (ADN)	Added	
	Carriage permitted (ADN)	Added	
	Excepted quantities (ADN)	Added	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Colis express (express parcels) (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (RID)	Added	
	Special provisions for carriage – Packages (RID)	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Transport category (RID)	Added	
	Tank codes for RID tanks (RID)	Added	
	Portable tank and bulk container special provisions (RID)	Added	
	Portable tank and bulk container instructions (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Special packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	
	Special provisions (RID)	Added	
	Packing group (RID)	Added	
	Classification code (RID)	Added	
	ERG code (IATA)	Added	
	Special provisions (IATA)	Added	
	CAO max net quantity (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA packing instructions (IATA)	Added	
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	
	PCA Excepted quantities (IATA)	Added	
	Danger labels (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	Proper Shipping Name (IMDG)	Added	
	Danger labels (IMDG)	Added	
	EmS-No. (Spillage)	Added	
	EmS-No. (Fire)	Added	
	Limited quantities (IMDG)	Added	
	Stowage category (IMDG)	Added	
	Tank special provisions (IMDG)	Added	
	Tank instructions (IMDG)	Added	
	IBC packing instructions (IMDG)	Added	
	Excepted quantities (IMDG)	Added	
	Special provisions (IMDG)	Added	
	Special provisions for carriage - Loading, unloading and handling (ADR)	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Special provisions for carriage - Packages (ADR)	Added	
	Tank code (ADR)	Added	
	Portable tank and bulk container special provisions (ADR)	Added	
	Portable tank and bulk container instructions (ADR)	Added	
	Mixed packing provisions (ADR)	Added	
	Special packing provisions (ADR)	Added	
	Packing instructions (ADR)	Added	
	Vehicle for tank carriage	Added	
	Reason for no classification	Added	
	Display additional SDS EU addresses	Added	
	Regulatory framework	Added	
	Flammability (solid, gas)	Added	
	Type of product	Added	
	Reference number	Added	
1.1	Product group	Added	
1.1	Name	Modified	
1.2	Use of the substance/mixture	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures general	Added	
4.1	First-aid measures after skin contact	Added	
4.1	First-aid measures after inhalation	Added	
4.1	First-aid measures after ingestion	Added	
4.1	First-aid measures after eye contact	Added	
4.2	Chronic symptoms	Added	
4.2	Symptoms/effects	Added	
4.2	Symptoms/effects after skin contact	Added	
4.2	Symptoms/effects after inhalation	Added	
4.2	Symptoms/effects after ingestion	Added	
4.2	Symptoms/effects after eye contact	Added	
4.3	Other medical advice or treatment	Added	
5.1	Unsuitable extinguishing media	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
5.1	Suitable extinguishing media	Added	
5.2	Fire hazard	Added	
5.2	Explosion hazard	Added	
5.2	Reactivity in case of fire	Added	
5.2	Hazardous decomposition products in case of fire	Added	
5.3	EAC code	Added	
5.3	Precautionary measures fire	Added	
5.3	Protection during firefighting	Added	
5.3	Firefighting instructions	Added	
6.1	Emergency procedures	Added	
6.1	Protective equipment	Added	
6.1	Emergency procedures	Added	
6.1	General measures	Added	
6.2	Environmental precautions	Added	
6.3	For containment	Added	
6.3	Methods for cleaning up	Added	
6.3	Other information	Added	
6.4	Reference to other sections (8, 13)	Added	
7.1	Precautions for safe handling	Added	
7.1	Hygiene measures	Added	
7.2	Heat and ignition sources	Added	
7.2	Incompatible products	Added	
7.2	Incompatible materials	Added	
7.2	Technical measures	Added	
7.2	Storage conditions	Added	
7.2	Storage area	Added	
7.2	Packaging materials	Added	
7.3	Specific end uses	Added	
8.2	Other information	Added	
8.2	Environmental exposure controls	Added	
8.2	Respiratory protection	Added	
8.2	Personal protective equipment	Added	
8.2	Hand protection	Added	
8.2	Eye protection	Added	
8.2	Appropriate engineering controls	Added	
8.2	Skin and body protection	Added	
9.1	Explosive properties	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
9.1	Viscosity, kinematic	Added	
9.1	Viscosity, dynamic	Added	
9.1	Relative density	Added	
9.1	Oxidising properties	Added	
9.1	Solubility	Added	
9.1	Vapour pressure	Added	
9.1	Solubility in water	Added	
9.1	Freezing point	Added	
9.1	Appearance	Added	
10.1	Reactivity	Added	
10.2	Chemical stability	Added	
10.3	Possibility of hazardous reactions	Added	
10.4	Conditions to avoid	Added	
10.5	Incompatible materials	Added	
10.6	Hazardous decomposition products	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Potential adverse human health effects and symptoms	Added	
12.1	Additional ecotoxicological information	Added	
12.1	Ecology - general	Added	
12.2	Persistence and degradability	Added	
12.3	Bioaccumulative potential	Added	
12.4	Ecology - soil	Added	
13.1	Product/Packaging disposal recommendations	Added	
13.1	Regional legislation (waste)	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (IATA)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (ADR)	Added	
14.3	Danger labels (RID)	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
14.3	Danger labels (ADR)	Added	
14.3	Class (ADR)	Added	
14.4	Packing group (ADN)	Added	
14.4	Packing group (IATA)	Added	
14.4	Packing group (IMDG)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Special packing provisions (IMDG)	Added	
14.6	Packing instructions (IMDG)	Added	
14.6	Transport category (ADR)	Added	
14.6	Special provisions (ADR)	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	Tunnel restriction code (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Classification code (ADR)	Added	
15.2	Chemical safety assessment	Added	
16	Data sources	Added	
16	Abbreviations and acronyms	Added	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level

Abbreviations and acronyms:	
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : Supplier's safety documents. ECHA (European Chemicals Agency). UNECE, http://www.unece.org/.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.

Full text of H- and EUH-statements:	
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Org. Perox. E	Organic Peroxides, Type E
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

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