

PAH&VOC PINNOITE+ A

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

1.1. Product identifier

Product name : PAH&VOC PINNOITE+ A
 Registration number REACH : Not applicable (mixture)
 Product type REACH : Mixture

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

1.2.1 Relevant identified uses

2-component system
 Moisture-repellent compound

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Hevadex bv
 Zoomstraat 6a
 B-9160 Lokeren
 ☎ +32 93 48 31 00
 info@hevadex.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
 +32 475 73 85 46

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Skin Sens.	category 1	H317: May cause an allergic skin reaction.
Acute Tox.	category 4	H302: Harmful if swallowed.
Skin Corr.	category 1B	H314: Causes severe skin burns and eye damage.
Eye Dam.	category 1	H318: Causes serious eye damage.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements



Contains: benzyl alcohol; 4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 2,4,6-tris(dimethylaminomethyl)phenol; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine); m-phenylenebis(methylamine).

Signal word Danger

H-statements

H317 May cause an allergic skin reaction.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H412 Harmful to aquatic life with long lasting effects.

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.
 P260 Do not breathe vapours/mist.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.

2.3. Other hazards

PAH&VOC PINNOITE+ A

Caution! Substance is absorbed through the skin

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
benzyl alcohol	100-51-6 202-859-9	25% ≤C≤51%	Skin Sens. 1B; H317 Acute Tox. 4; H302 Eye Irrit. 2; H319	(1)(2)(10)	Constituent	ATE oral: 1200 mg/kg
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane, reaction products with 3- aminomethyl-3,5,5- trimethylcyclohexylamine	38294-64-3 500-101-4	25% ≤C≤51%	Skin Sens. 1; H317 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	(1)(10)	Constituent	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2 202-013-9	14.3%	Skin Corr. 1C; H314 Eye Dam. 1; H318	(1)(6)(10)	Constituent	
3-aminomethyl-3,5,5- trimethylcyclohexylamine	2855-13-2 220-666-8	4%≤C≤13%	Skin Sens. 1; H317 Acute Tox. 4; H312 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	(1)(6)(10)	Constituent	ATE oral: 1030 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane, reaction products with m- phenylenebis(methylamine)	113930-69-1 500-302-7	4%≤C≤13% %	Skin Sens. 1; H317 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 2; H411	(1)(10)	Constituent	
m-phenylenebis(methylamine)	1477-55-0 216-032-5	C<4.2%	Skin Sens. 1B; H317 Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412 EUH071	(1)(2)(10)	Constituent	

(1) For H- and EUH-statements in full: see section 16

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:

Remove victim into fresh air. Immediately consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately for 30 minutes with (lukewarm) water. Cut clothing; never remove burnt clothing from the wound. Do not give any pain medication. Consult a doctor/medical service.

After eye contact:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a doctor/medical service.

After ingestion:

Rinse mouth with water. Immediately consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract.

After skin contact:

Caustic burns/corrosion of the skin.

After eye contact:

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

Corrosion of the eye tissue.

After ingestion:

Burns to the gastric/intestinal mucosa. Possible esophageal perforation.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, hydrogen chloride, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Use water moderately and if possible collect or contain it. Take account of toxic fire-fighting water. Heat exposure: dilute toxic gas/vapour with water spray.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137). Large spills/in enclosed spaces: gas-tight suit (EN 943). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames. Large spills/in confined spaces: consider evacuation. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137). Large spills/in enclosed spaces: gas-tight suit (EN 943).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers.

Damaged/cooled tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately. Keep container tightly closed. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: 5 °C - 25 °C. Meet the legal requirements. Provide for a tub to collect spills.

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

No data available

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

7.2.4 Non suitable packaging material:
No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

Belgium

m-Xylène α, α'-diamine	Short time value	0.1 mg/m ³ (1)
------------------------	------------------	---------------------------

(1) M: La mention "M" indique que lors d'une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d'intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l'exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d'échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d'échantillonnage.

France

m-Xylène-α,α'-diamine	Short time value (VL: Valeur non réglementaire indicative)	0.1 mg/m ³
-----------------------	--	-----------------------

Germany

Benzylalkohol	Time-weighted average exposure limit 8 h (TRGS 900)	22 mg/m ³ (1)
	Time-weighted average exposure limit 8 h (TRGS 900)	5 ppm (1)
	Summe aus Dampf und Aerosolen.	
Isophorondiamin	Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen. Vgl. Abschn. lib	
m-Xylylendiamin	Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen.	

(1) UF: 2 (I)

Austria

α,α'-Diamino-1,3-xylol	Tagesmittelwert (MAK)	0.1 mg/m ³
	Kurzzeitwert Mow (MAK)	

USA (TLV-ACGIH)

m-Xylene alfa, alfa'-diamine	Momentary value (TLV - Adopted Value)	0.018 ppm
------------------------------	---------------------------------------	-----------

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Amines, aromatic	NIOSH	2002
Benzyl Alcohol	OSHA	2009
Butyl Acrylate	OSHA	2011
m-Xylene-a,a-diamine	OSHA	105

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

benzyl alcohol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	22 mg/m ³	
	Acute systemic effects inhalation	110 mg/m ³	
	Long-term systemic effects dermal	8 mg/kg bw/day	
	Acute systemic effects dermal	40 mg/kg bw/day	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.493 mg/m ³	
	Long-term systemic effects dermal	0.14 mg/kg bw/day	

2,4,6-tris(dimethylaminomethyl)phenol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.53 mg/m ³	
	Acute systemic effects inhalation	2.1 mg/m ³	
	Long-term systemic effects dermal	0.15 mg/kg bw/day	
	Acute systemic effects dermal	0.6 mg/kg bw/day	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term local effects inhalation	0.073 mg/m ³	
	Acute local effects inhalation	0.073 mg/m ³	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.493 mg/m ³	
	Long-term systemic effects dermal	0.14 mg/kg bw/day	

m-phenylenebis(methylamine)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.2 mg/m ³	
	Long-term local effects inhalation	0.2 mg/m ³	
	Long-term systemic effects dermal	0.33 mg/kg bw/day	

DNEL/DMEL - General population

benzyl alcohol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	5.4 mg/m ³	
	Acute systemic effects inhalation	27 mg/m ³	
	Long-term systemic effects dermal	4 mg/kg bw/day	
	Acute systemic effects dermal	20 mg/kg bw/day	
	Long-term systemic effects oral	4 mg/kg bw/day	
	Acute systemic effects oral	20 mg/kg bw/day	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	74 µg/m ³	
	Long-term systemic effects dermal	50 µg/kg bw/day	
	Long-term systemic effects oral	50 µg/kg bw/day	

2,4,6-tris(dimethylaminomethyl)phenol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.13 mg/m ³	
	Acute systemic effects inhalation	0.13 mg/m ³	
	Long-term systemic effects dermal	0.075 mg/kg bw/day	
	Acute systemic effects dermal	0.075 mg/kg bw/day	
	Long-term systemic effects oral	0.075 mg/kg bw/day	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	0.3 mg/kg bw/day	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	74 µg/m ³	
	Long-term systemic effects dermal	50 µg/kg bw/day	
	Long-term systemic effects oral	50 µg/kg bw/day	

PNEC

benzyl alcohol

Compartments	Value	Remark
Fresh water	1 mg/l	
Marine water	0.1 mg/l	
Fresh water (intermittent releases)	2.3 mg/l	
STP	39 mg/l	
Fresh water sediment	5.27 mg/kg sediment dw	
Marine water sediment	0.527 mg/kg sediment dw	
Soil	0.456 mg/kg soil dw	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Compartments	Value	Remark
Fresh water	0.011 mg/l	
Fresh water (intermittent releases)	0.111 mg/l	
Marine water	0.001 mg/l	
STP	10 mg/l	
Fresh water sediment	4320 mg/kg sediment dw	
Marine water sediment	432 mg/kg sediment dw	
Soil	864 mg/kg soil dw	
Oral	1 mg/kg food	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

2,4,6-tris(dimethylaminomethyl)phenol

Compartments	Value	Remark
Fresh water	0.046 mg/l	
Marine water	0.005 mg/l	
Fresh water (intermittent releases)	0.46 mg/l	
Marine water (intermittent releases)	0.046 mg/l	
STP	0.2 mg/l	
Fresh water sediment	0.262 mg/kg sediment dw	
Marine water sediment	0.026 mg/kg sediment dw	
Soil	0.025 mg/kg soil dw	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Compartments	Value	Remark
Fresh water	0.06 mg/l	
Fresh water (intermittent releases)	0.23 mg/l	
Marine water	0.006 mg/l	
STP	3.18 mg/l	
Fresh water sediment	5.784 mg/kg sediment dw	
Marine water sediment	0.578 mg/kg sediment dw	
Soil	1.121 mg/kg soil dw	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Compartments	Value	Remark
Fresh water	0.001 mg/l	
Marine water	0 mg/l	
Fresh water (intermittent releases)	0.015 mg/l	
Marine water (intermittent releases)	0.001 mg/l	
STP	8.889 mg/l	
Fresh water sediment	4610000 mg/kg sediment dw	
Marine water sediment	461000 mg/kg sediment dw	
Soil	923000 mg/kg soil dw	
Oral	3.33 mg/kg food	

m-phenylenebis(methylamine)

Compartments	Value	Remark
Fresh water	0.094 mg/l	
Fresh water (intermittent releases)	0.152 mg/l	
Marine water	0.009 mg/l	
STP	10 mg/l	
Fresh water sediment	12.4 mg/kg sediment dw	
Marine water sediment	1.24 mg/kg sediment dw	
Soil	2.44 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

c) Eye protection:

Face shield (EN 166).

d) Skin protection:

Corrosion-proof clothing (EN 14605).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Colour	Yellow
Translucency	Translucent
Odour	Odourless
Odour threshold	No data available (test not performed)

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

Melting point	No data available (test not performed)
Boiling point	No data available (test not performed)
Flammability	Not classified as flammable
Explosion limits	No data available (test not performed)
Flash point	No data available (test not performed)
Auto-ignition temperature	No data available (test not performed)
Decomposition temperature	No data available (test not performed)
pH	No data available (test not performed)
Kinematic viscosity	No data available (test not performed)
Dynamic viscosity	No data available (test not performed)
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	No data available (test not performed)
Absolute density	No data available (test not performed)
Relative density	No data available (test not performed)
Relative vapour density	No data available (test not performed)
Particle size	Not applicable (liquid)

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, hydrogen chloride, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

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

11.1.1 Test results

Acute toxicity

benzyl alcohol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		1620 mg/kg bw		Rat (male)	Experimental value	
Dermal	LD50	EPA OTS 798.1100	> 2000 mg/kg	24 h	Rabbit (male / female)	Experimental value	
Inhalation (aerosol)	LC50	OECD 403	> 4.18 mg/l air	4 h	Rat (male / female)	Experimental value	

2,4,6-tris(dimethylaminomethyl)phenol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	2169 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation						Data waiving	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	1030 mg/kg		Rat (male)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Dermal			category 4			Literature study	
Inhalation (aerosol)	LC50	OECD 403	> 5.01 mg/l	4 h	Rat (male / female)	Experimental value	

Classification of this substance is debatable as it does not correspond to the conclusion from the test

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral						Data waiving	
Skin						Data waiving	
Inhalation						Data waiving	

m-phenylenebis(methylamine)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	930 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50		> 3100 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation (mist)	LC50	OECD 403	1.34 mg/l	4 h	Rat (male / female)	Experimental value	

Conclusion

Harmful if swallowed.

Not classified as acute toxic in contact with skin

Not classified as acute toxic if inhaled

Corrosion/irritation

benzyl alcohol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405	24 h	24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Skin	Slightly irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Not applicable (in vitro test)	Corrosive	OECD 431	3 minutes - 60 minutes		Reconstructed human epidermis	Experimental value	

2,4,6-tris(dimethylaminomethyl)phenol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	16 CFR 1500.42		3 days	Rabbit	Experimental value	Single treatment with rinsing
Skin	Corrosive	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	OECD 405		24 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Corrosive	Draize Test	24 h	24; 72 hours	Rabbit	Experimental value	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Data waiving	
Not applicable (in vitro test)	Corrosive	OECD 431	3 minutes		Reconstructed human epidermis	Experimental value	
						Data waiving	

Data waiving for eye corrosion based on corrosive properties

m-phenylenebis(methylamine)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Skin	Corrosive	Equivalent to EU Method B.4	4 h	4 hours	Rat	Experimental value	

Data waiving for eye corrosion based on corrosive properties

Conclusion

Causes severe skin burns and eye damage.

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

benzyl alcohol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	Modified Freund's adjuvant test			Guinea pig	Experimental value	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing; category 1					Literature study	

2,4,6-tris(dimethylaminomethyl)phenol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Limited positive test result	OECD 406		24 hours	Guinea pig	Experimental value	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406			Guinea pig (male)	Experimental value	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal	Sensitizing; category 1					Literature study	

m-phenylenebis(methylamine)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Sensitizing	OECD 429			Mouse (female)	Experimental value	

Conclusion

May cause an allergic skin reaction.

Not classified as sensitizing for inhalation

Specific target organ toxicity

benzyl alcohol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	Equivalent to OECD 451	400 mg/kg bw/day	No effect	103 weeks (5 days / week)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation (aerosol)	NOAEC	OECD 412	1072 mg/m ³ air	No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	10 mg/kg bw/day	No effect	90 day(s)	Rat (male / female)	Experimental value	

2,4,6-tris(dimethylaminomethyl)phenol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	15 mg/kg bw/day	No effect	90 day(s)	Rat (male / female)	Experimental value	
Dermal	NOEL	Subchronic toxicity test	5 mg/kg bw/day	Skin (no effect)	4 weeks (5 days / week)	Rat	Experimental value	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (drinking water)	NOAEL	OECD 408	59 mg/kg bw/day - 62 mg/kg bw/day	Kidney (no effect)	13 weeks (daily)	Rat (male / female)	Experimental value	
Oral (drinking water)	LOAEL	OECD 408	160 mg/kg bw/day	Kidney (histopathology)	13 weeks (daily)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation (mixture of vapour and aerosol)	LOEC	Subacute toxicity test	18 mg/m ³ air	Nose (local effects)		Rat (male)	Experimental value	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOEL	OECD 407	100 mg/kg bw/day	No effect	28 days (continuous)	Rat (male / female)	Experimental value	
Oral (stomach tube)	NOAEL	OECD 408	10 mg/kg bw/day	No effect	90 day(s)	Rat (male / female)	Experimental value	

m-phenylenebis(methylamine)

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOEL	Equivalent to OECD 407	150 mg/kg bw/day	No effect	4 weeks (daily)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation (aerosol)	NOAEC	OECD 413	5 mg/m ³ air	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

benzyl alcohol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
Positive without metabolic activation, negative with metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value	

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	EU Method B.13/14	Bacteria (S. typhimurium and E. coli)		Experimental value	

2,4,6-tris(dimethylaminomethyl)phenol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)		Experimental value	

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)		Experimental value	

m-phenylenebis(methylamine)

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	
Negative without metabolic activation	OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	

Mutagenicity (in vivo)

benzyl alcohol

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	Equivalent to OECD 474		Mouse (male)	Bone marrow (no effect)	Experimental value	Single intraperitoneal injection

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach tube))	OECD 474		Mouse (male / female)	Blood (no effect)	Experimental value	Single treatment

m-phenylenebis(methylamine)

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach tube))	OECD 474		Mouse (male / female)	Bone marrow (no effect)	Experimental value	Single treatment

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

benzyl alcohol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	Dose level	Equivalent to OECD 451	400 mg/kg bw/day	No carcinogenic effect	104 weeks (5 days / week)	Rat (male / female)	Experimental value	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Unknown							Data waiving	

m-phenylenebis(methylamine)

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Unknown							Data waiving	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

benzyl alcohol

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	175 mg/kg bw/day	10 days (1x / day)	Rat	No effect	Read-across	
Maternal toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	175 mg/kg bw/day	10 days (1x / day)	Rat	No effect	Read-across	
Effects on fertility (Oral (diet))	NOAEL		≥ 750 mg/kg bw/day		Rat (male / female)	No effect	Read-across	Lifetime

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOEL	OECD 414	≥ 250 mg/kg bw/day	17 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	100 mg/kg bw/day	17 days (gestation, daily)	Rat	No effect	Experimental value	

2,4,6-tris(dimethylaminomethyl)phenol

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	150 mg/kg bw/day	15 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	20 mg/kg bw/day	15 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOEL	OECD 422	15 mg/kg bw/day	54 day(s)	Rat (male / female)	No effect	Experimental value	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	> 250 mg/kg bw/day	2 weeks (daily)	Rat	Foetus (no effect)	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOEL	OECD 414	50 mg/kg bw/day	2 weeks (daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 443	80 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOEL	OECD 414	250 mg/kg bw/day	17 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	100 mg/kg bw/day	17 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility							Data waiving	

m-phenylenebis(methylamine)

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	300 mg/kg bw/day	14 day(s)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	100 mg/kg bw/day	14 day(s)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOEL	OECD 421	50 mg/kg bw/day		Rat (male)	Male reproductive organ (no effect)	Experimental value	
Effects on fertility (Oral (stomach tube))	NOEL	OECD 421	150 mg/kg bw/day		Rat (female)	Female reproductive organ (no effect)	Experimental value	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

PAH&VOC PINNOITE+ A

Not classified for aspiration toxicity

Chronic effects from short and long-term exposure

PAH&VOC PINNOITE+ A

Skin rash/inflammation.

11.2. Information on other hazards

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

PAH&VOC PINNOITE+ A

benzyl alcohol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		460 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	230 mg/l	48 h	Daphnia magna		Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	NOEC	OECD 201	310 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	ErC50	OECD 201	770 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOEC	ECOSAR v1.00	49 mg/l	30 day(s)	Pisces		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	OECD 211	51 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	IC50	ISO 8192	2100 mg/l	49 h	Activated sludge	Static system	Fresh water	Experimental value
	IC50	ISO 8192	390 mg/l	24 h	Nitrosomonas	Static system	Fresh water	Experimental value; Inhibition

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	71 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	EL50	OECD 202	11 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EL50	OECD 201	79 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOELR	OECD 201	3.1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate

2,4,6-tris(dimethylaminomethyl)phenol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h	Cyprinus carpio	Static system		Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system		Experimental value; Lethal
Toxicity algae and other aquatic plants	ErC50	OECD 201	47 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Measured concentration
	NOEC	OECD 201	6.4 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate

3-aminomethyl-3,5,5-trimethylcyclohexylamine

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	110 mg/l	96 h	Leuciscus idus	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	23 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	EU Method C.3	> 50 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Nominal concentration
	EC10	EU Method C.3	11 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 202	3 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC10		1120 mg/l	18 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Nominal concentration

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	64 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	1.5 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EL50	OECD 201	> 30 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOELR	OECD 201	≥ 30 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Toxicity aquatic micro-organisms	EC50	OECD 209	889 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

m-phenylenebis(methylamine)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	88 mg/l	96 h	Oryzias latipes	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	15 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	33 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Experimental value; Nominal concentration
	NOEC	OECD 201	23 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	4.7 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50	OECD 209	> 1000 mg/l	30 minutes	Activated sludge	Static system		Experimental value; Respiration

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

benzyl alcohol

Biodegradation water

Method	Value	Duration	Value determination
Equivalent to OECD 301C	92 % - 96 %; Oxygen consumption	14 day(s)	Experimental value

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	0 %; Oxygen consumption	28 day(s)	Experimental value

2,4,6-tris(dimethylaminomethyl)phenol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	4 %; Oxygen consumption	28 day(s)	Experimental value

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Biodegradation water

Method	Value	Duration	Value determination
EU Method C.4	8 %; GLP	28 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111	> 1 year(s); GLP	Primary degradation	Experimental value

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	0 %; Oxygen consumption	28 day(s)	Experimental value

m-phenylenebis(methylamine)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	49 %; Carbon dioxide	28 day(s)	Experimental value

Conclusion

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

PAH&VOC PINNOITE+ A

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

benzyl alcohol

Log Kow

Method	Remark	Value	Temperature	Value determination
		1.1	20 °C	Experimental value

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-

trimethylcyclohexylamine

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		5.1; Fresh weight		Pisces	QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		3.6		Experimental value

2,4,6-tris(dimethylaminomethyl)phenol

Log Kow

Method	Remark	Value	Temperature	Value determination
EPA OPPTS 830.7560		-0.66	21.5 °C	Experimental value

3-aminomethyl-3,5,5-trimethylcyclohexylamine

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	1.8 - 3.2		Pisces	Estimated value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		0.99	23 °C	Experimental value

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		4.8; Fresh weight			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		3.6	25 °C	Experimental value

m-phenylenebis(methylamine)

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		0.18	25 °C	Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

benzyl alcohol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.1 - 1.3	Calculated value

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-

trimethylcyclohexylamine

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	> 5.6	Experimental value

2,4,6-tris(dimethylaminomethyl)phenol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.3	QSAR

3-aminomethyl-3,5,5-trimethylcyclohexylamine

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.6 - 2.3	Calculated value

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	10.5	Experimental value

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

m-phenylenebis(methylamine)

(log) Koc

Parameter	Method	Value	Value determination
log Koc		3.1	QSAR

Conclusion

Contains component(s) with potential for mobility in the soil
Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

PAH&VOC PINNOITE+ A

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

benzyl alcohol

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

2,4,6-tris(dimethylaminomethyl)phenol

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

Water ecotoxicity pH

pH shift

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

m-phenylenebis(methylamine)

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Water ecotoxicity pH

pH shift

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

07 07 08* (wastes from the MFSU of fine chemicals and chemical products not otherwise specified: other still bottoms and reaction residues). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number or ID number	
UN number	2735
14.2. UN proper shipping name	
Proper shipping name	amines, liquid, corrosive, n.o.s. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es)	
Hazard identification number	80
Class	8
Classification code	C7
14.4. Packing group	
Packing group	II
Labels	8
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	274
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

Rail (RID)

14.1. UN number or ID number	
UN number	2735
14.2. UN proper shipping name	
Proper shipping name	amines, liquid, corrosive, n.o.s. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es)	
Hazard identification number	80
Class	8
Classification code	C7
14.4. Packing group	
Packing group	II
Labels	8
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	274
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

Inland waterways (ADN)

14.1. UN number or ID number	
UN number/ID number	2735
14.2. UN proper shipping name	
Proper shipping name	amines, liquid, corrosive, n.o.s. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es)	
Class	8
Classification code	C7
14.4. Packing group	
Packing group	II
Labels	8
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	274
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

Sea (IMDG/IMSBC)

14.1. UN number or ID number	UN number	2735
14.2. UN proper shipping name	Proper shipping name	amines, liquid, corrosive, n.o.s. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es)	Class	8
14.4. Packing group	Packing group	II
	Labels	8
14.5. Environmental hazards	Marine pollutant	-
	Environmentally hazardous substance mark	no
14.6. Special precautions for user	Special provisions	274
	Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
14.7. Maritime transport in bulk according to IMO instruments	Annex II of MARPOL 73/78	Not applicable, based on available data

Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number	UN number/ID number	2735
14.2. UN proper shipping name	Proper shipping name	amines, liquid, corrosive, n.o.s. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es)	Class	8
14.4. Packing group	Packing group	II
	Labels	8
14.5. Environmental hazards	Environmentally hazardous substance mark	no
14.6. Special precautions for user	Special provisions	A3
	Special provisions	A803
Passenger and cargo transport	Limited quantities: maximum net quantity per packaging	0.5 L

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
0 %	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Reference legislation

See column 1: 3.

See column 1: 75.

National legislation Belgium

PAH&VOC PINNOITE+ A

No data available

m-phenylenebis(methylamine)

Résorption peau	m-Xylène α, α'-diamine; D; La mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air.
-----------------	---

National legislation The Netherlands

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

PAH&VOC PINNOITE+ A

Waterbezwaarlijkheid	A (3); Algemene Beoordelingsmethodiek (ABM)
----------------------	---

National legislation Germany

PAH&VOC PINNOITE+ A

Lagerklasse (TRGS510)	8 A: Brennbare ätzende Gefahrstoffe
WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

benzyl alcohol

TA-Luft	5.2.5/I
TRGS900 - Risiko der Fruchtschädigung	Benzylalkohol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Hautresorptive Stoffe	Benzylalkohol; H; Hautresorptiv

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

TA-Luft	5.2.5
---------	-------

2,4,6-tris(dimethylaminomethyl)phenol

TA-Luft	5.2.5
---------	-------

3-aminomethyl-3,5,5-trimethylcyclohexylamine

TA-Luft	5.2.5
---------	-------

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

TA-Luft	5.2.5
---------	-------

m-phenylenebis(methylamine)

TA-Luft	5.2.5
---------	-------

Other relevant data

PAH&VOC PINNOITE+ A

No data available

m-phenylenebis(methylamine)

TLV - Skin absorption	m-Xylene alfa,alfa'-diamine; Skin; Danger of cutaneous absorption
-----------------------	---

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption,

Publication date: 2024-04-03

PAH&VOC PINNOITE+ A

storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Publication date: 2024-04-03