

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

NOVABLACK MAGIC

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

1.1. Product identifier

Product name : NOVABLACK MAGIC
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

Filler
Sealing 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

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
✉ +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
✉ +32 14 85 97 38
info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):
+32 14 58 45 45 (BIG)

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
Flam. Liq.	category 3	H226: Flammable liquid and vapour.
Repr.	category 2	H361d: Suspected of damaging the unborn child.
STOT RE	category 1	H372: Causes damage to organs (hearing organs) through prolonged or repeated exposure if inhaled.
Skin Irrit.	category 2	H315: Causes skin irritation.
Eye Irrit.	category 2	H319: Causes serious eye irritation.

2.2. Label elements



Contains: styrene.

Signal word

Danger

H-statements

H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs (ears (hearing damage)) through prolonged or repeated exposure if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

P-statements

NOVABLACK MAGIC

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves, protective clothing and eye protection/face protection.
P260	Do not breathe vapours.
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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
Supplemental information	
EUH208	Contains: 1,4-dihydroxybenzene. May produce an allergic reaction.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

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
styrene 01-2119457861-32	100-42-5 202-851-5	12.5% <C<20%	Flam. Liq. 3; H226 Repr. 2; H361d STOT RE 1; H372 Acute Tox. 4; H332 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent
barium sulfate	7727-43-7 231-784-4	10% C<12.5%		(2)	Constituent
1,4-dihydroxybenzene 01-2119987571-26	123-31-9 204-617-8	C≤0.5%	Muta. 2; H341 Carc. 2; H351 Skin Sens. 1; H317 Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400	(1)(2)(9)	Constituent

(1) For H-statements in full: see heading 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

(9) M-factor, see heading 16

(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:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

Tingling/irritation of the skin.

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

2 / 17

NOVABLACK MAGIC

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

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 (sulphur dioxide, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters**5.3.1 Instructions:**

If exposed to fire cool the closed containers by spraying with water. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Safety glasses. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Safety glasses. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. 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 heading 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. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges. Observe very strict hygiene - avoid contact. Keep container tightly closed. Remove contaminated clothing immediately. 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: < 25 °C. Store in a cool area. Keep container in a well-ventilated place. Keep container tightly closed. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

NOVABLACK MAGIC

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

Baryum (sulfate de)	Time-weighted average exposure limit 8 h	10 mg/m ³
Hydroquinone	Time-weighted average exposure limit 8 h	1 mg/m ³
Styrène (monomère)	Time-weighted average exposure limit 8 h	25 ppm
	Time-weighted average exposure limit 8 h	108 mg/m ³
	Short time value	50 ppm
	Short time value	216 mg/m ³

France

Hydroquinone	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	2 mg/m ³
Styrène	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	23.3 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	100 mg/m ³
	Short time value (VRI: Valeur réglementaire indicative)	46.6 ppm
	Short time value (VRI: Valeur réglementaire indicative)	200 mg/m ³

Germany

Styrol	Time-weighted average exposure limit 8 h (TRGS 900)	20 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	86 mg/m ³

UK

Barium sulphate inhalable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m ³
Barium sulphate respirable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m ³
Hydroquinone	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.5 mg/m ³
Styrene	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	430 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	250 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1080 mg/m ³

USA (TLV-ACGIH)

Barium sulfate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	5 mg/m ³ (I,E)
Hydroquinone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m ³
Styrene, monomer	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	20 ppm
	Short time value (TLV - Adopted Value)	40 ppm

I,E: Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica

b) National biological limit values

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

Germany

Styrol (Mandelsäure plus Phenylglyoxylsäure)	Urin: bei langzeitexposition: am schichtende nach mehreren vorangegangenen schichten expositionsende, bzw. schichtende	600 mg/g Kreatinin	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
--	--	--------------------	--

USA (BEI-ACGIH)

Methemoglobin inducers (Methemoglobin)	Blood: during or end of shift	1,5 % of hemoglobin	
Styrene (Mandelic acid plus phenylglyoxylic acid)	Urine: end of shift	400 mg/g creatinine	
Styrene (Styrene)	Urine: end of shift	40 µg/L	

8.1.2 Sampling methods

Product name	Test	Number
Hydroquinone	NIOSH	5004
Hydroquinone	OSHA	2094

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

4 / 17

NOVABLACK MAGIC

Product name	Test	Number
Styrene (Diffusive Samplers)	OSHA	1014
Styrene (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Styrene (Phenylethylene) (Hydrocarbons, aromatic)	NIOSH	1501
Styrene	NON	37
Styrene	OSHA	89
Styrene	OSHA	9

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 DNEL/PNEC values

DNEL/DMEL - Workers

styrene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	85 mg/m ³	
	Acute systemic effects inhalation	289 mg/m ³	
	Acute local effects inhalation	306 mg/m ³	
	Long-term systemic effects dermal	406 mg/kg bw/day	

barium sulfate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10 mg/m ³	
DNEL/DMEL	Long-term local effects inhalation	10 mg/m ³	

1,4-dihydroxybenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2.1 mg/m ³	
	Long-term systemic effects dermal	3.33 mg/kg bw/day	

DNEL/DMEL - General population

styrene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10.2 mg/m ³	
	Acute systemic effects inhalation	174.25 mg/m ³	
	Acute local effects inhalation	182.75 mg/m ³	
	Long-term systemic effects dermal	343 mg/kg bw/day	
	Long-term systemic effects oral	2.1 mg/kg bw/day	

barium sulfate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10 mg/m ³	
	Long-term systemic effects oral	13000 mg/kg bw/day	

1,4-dihydroxybenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.05 mg/m ³	
	Long-term systemic effects dermal	1.66 mg/kg bw/day	
	Long-term systemic effects oral	0.6 mg/kg bw/day	

PNEC

styrene

Compartments	Value	Remark
Fresh water	0.028 mg/l	
Marine water	0.014 mg/l	
Fresh water (intermittent releases)	0.04 mg/l	
STP	5 mg/l	
Fresh water sediment	0.614 mg/kg sediment dw	
Marine water sediment	0.307 mg/kg sediment dw	
Soil	0.2 mg/kg soil dw	

barium sulfate

Compartments	Value	Remark
Fresh water	115 µg/l	
STP	62.2 mg/l	
Fresh water sediment	600.4 mg/kg sediment dw	
Soil	207.7 mg/kg soil dw	

1,4-dihydroxybenzene

Compartments	Value	Remark
Fresh water	0.57 µg/l	
Marine water	0.057 µg/l	
Fresh water (intermittent releases)	1.34 µg/l	
STP	0.71 mg/l	
Fresh water sediment	4.9 µg/kg sediment dw	
Marine water sediment	0.49 µg/kg sediment dw	
Soil	0.64 µg/kg soil dw	

8.1.5 Control banding

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

5 / 17

NOVABLACK MAGIC

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. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges. 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. Keep container tightly closed. 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:

Gloves.

Materials	Breakthrough time	Thickness
butyl rubber		0.4 mm

- materials (good resistance)

Butyl rubber.

c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Paste
Odour	Characteristic odour
Odour threshold	No data available
Colour	Black
Particle size	No data available
Explosion limits	1.2 - 8.9 vol %
Flammability	Flammable liquid and vapour.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	145 °C
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	6 hPa ; 20 °C
Solubility	Water ; insoluble
Relative density	1.9 ; 20 °C
Decomposition temperature	No data available
Auto-ignition temperature	480 °C
Flash point	31 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

9.2. Other information

Absolute density	1850 kg/m ³ ; 20 °C
------------------	--------------------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition 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

NOVABLACK MAGIC

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVABLACK MAGIC

No (test)data on the mixture available

Judgement is based on the relevant ingredients

styrene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 6000 mg/kg bw		Hamster (male)	Weight of evidence	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male/female)	Experimental value	
Dermal	LC0	OECD 402	2000 mg/kg bw	24 h	Rat (male/female)	Experimental value	
Inhalation (vapours)	LC50		11.8 mg/l air	4 h	Rat	Inconclusive, insufficient data	
Inhalation			category 4			Expert judgement	

barium sulfate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 5000 mg/kg		Rat (male)	Experimental value	
Dermal						Data waiving	
Inhalation						Data waiving	

1,4-dihydroxybenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 375 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rabbit (male/female)	Experimental value	
Inhalation (aerosol)	LD0		≥ 7800 mg/m ³ air	1 h	Rat (female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVABLACK MAGIC

No (test)data on the mixture available

Classification is based on the relevant ingredients

styrene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Annex VI	
Skin	Irritating; category 2					Annex VI	
Inhalation	Irritating; STOT SE cat.3					Literature study	

NOVABLACK MAGIC

barium sulfate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405	1 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	RHE-model test	15 minutes	15 minutes	Reconstructed human epidermis	Read-across	

1,4-dihydroxybenzene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Annex VI	
Skin	Not irritating	Other	24 h	24 hours	Rat	Weight of evidence	

Conclusion

Causes skin irritation.
Causes serious eye irritation.
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

NOVABLACK MAGIC

No (test)data on the mixture available
Judgement is based on the relevant ingredients

barium sulfate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 429			Mouse (female)	Read-across	

1,4-dihydroxybenzene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	Equivalent to OECD 429	3 day(s)		Mouse (female)	Experimental value	

Conclusion

Not classified as sensitizing for skin
Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVABLACK MAGIC

No (test)data on the mixture available
Classification is based on the relevant ingredients

styrene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL		1000 mg/kg bw/day		No effect	78 week(s) - 103 week(s)	Rat (male/female)	Experimental value
Inhalation (vapours)	LOAEC	Equivalent to OECD 453	0.21 mg/l air	Nose	Erosion/degeneration nasal epithelia	104 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation (vapours)	NOAEC		2.13 mg/l air	Hearing organs	Auditory disturbances	4 weeks (6h/day, 5 days/week)	Rat (male)	Experimental value
Inhalation (vapours)	Dose level		< 50 ppmSTOT RE cat.1		Sensorial disturbances		Human	Expert judgement

barium sulfate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (drinking water)	NOAEL		≥ 104 mg/kg bw/day			92 day(s)	Rat (male/female)	Read-across
Dermal								Data waiving
Inhalation (dust)	Dose level		40 mg/m³ air		No effect	2 month(s)	Rat	Experimental value

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

8 / 17

NOVABLACK MAGIC

1,4-dihydroxybenzene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 453	25 mg/kg bw/day		No effect	65 weeks (5 days/week) - 103 weeks (5 days/week)	Rat (male/female)	Experimental value
Dermal	NOAEL	Equivalent to OECD 411	73.9 mg/l - 109.6 mg/l		No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation								Data waiving

Conclusion

Causes damage to organs (hearing organs) through prolonged or repeated exposure if inhaled.

Not classified as sub-chronically toxic in contact with skin

Not classified as sub-chronically toxic if swallowed

Mutagenicity (in vitro)

NOVABLACK MAGIC

No (test)data on the mixture available

styrene

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value
Positive	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value
Positive	Equivalent to OECD 473	Human lymphocytes		Experimental value

barium sulfate

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 473	Chinese hamster ovary (CHO)	No effect	Read-across

1,4-dihydroxybenzene

Result	Method	Test substrate	Effect	Value determination
Positive	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value

Mutagenicity (in vivo)

NOVABLACK MAGIC

No (test)data on the mixture available

Judgement is based on the relevant ingredients

styrene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474	1 days (6h/day) - 21 days (6h/day)	Mouse (male)		Experimental value

1,4-dihydroxybenzene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Inhalation)	Equivalent to OECD 478	10 weeks (5 days/week)	Rat (male)		Experimental value
Positive	Equivalent to OECD 483		Mouse (male)		Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVABLACK MAGIC

No (test)data on the mixture available

Judgement is based on the relevant ingredients

styrene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 4.34 mg/l air	104 weeks (6h/day, 5 days/week)	Rat (male/female)	No carcinogenic effect		Experimental value
Oral	NOAEL		≥ 2000 mg/kg bw/day	78 week(s) - 103 week(s)	Rat (male/female)	No carcinogenic effect		Experimental value

barium sulfate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral (drinking water)	NOAEL		≥ 102 mg/kg	105 week(s)	Rat (male/female)	No effect		Read-across

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

9 / 17

NOVABLACK MAGIC

1,4-dihydroxybenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	Dose level	Equivalent to OECD 453	50 mg/kg bw/day	65 weeks (5 days/week) - 103 weeks (5 days/week)	Rat (male)	Tumor formation	Kidney	Experimental value
Oral	Dose level	Equivalent to OECD 453	≥ 25 mg/kg bw/day	65 weeks (5 days/week) - 103 weeks (5 days/week)	Rat (female)	Change in the haemogramme/blood composition	Blood	Experimental value

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVABLACK MAGIC

No (test)data on the mixture available

Judgement is based on the relevant ingredients

styrene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	≥ 2.556 mg/l air	10 days (7h/day)	Rat	No effect		Experimental value
			category 2			Teratogenicity		Annex VI
Maternal toxicity	LOAEC	Equivalent to OECD 414	1.278 mg/l air	10 days (7h/day)	Rat	Reduced body weight and food consumption		Experimental value
Effects on fertility	Dose level	OECD 416	2.13 mg/l air	70 days (6h/day)	Rat (male/female)	No effect		Experimental value

barium sulfate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Effects on fertility								Data waiving

1,4-dihydroxybenzene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOEL	Equivalent to OECD 414	100 mg/kg bw/day	10 day(s)	Rat (female)	No effect	Foetus	Experimental value
Maternal toxicity	NOEL	Equivalent to OECD 414	100 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Effects on fertility	NOAEL (F1/F2)	EPA OTS 798.4700	150 mg/kg bw/day	40 weeks (daily)	Rat (male/female)	No effect		Experimental value
	NOEL	Other	300 mg/kg bw/day	67 day(s)	Rat (male/female)	No effect		Experimental value

Conclusion

Suspected of damaging the unborn child.

Toxicity other effects

NOVABLACK MAGIC

No (test)data on the mixture available

Chronic effects from short and long-term exposure

NOVABLACK MAGIC

Skin rash/inflammation. Auditory disturbances.

SECTION 12: Ecological information

12.1. Toxicity

NOVABLACK MAGIC

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

10 / 17

NOVABLACK MAGIC

styrene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	10 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	4.7 mg/l	48 h	Daphnia magna	Flow-through system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	EPA OTS 797.1050	4.9 mg/l	72 h	Pseudokirchneria subcapitata	Static system	Fresh water	Experimental value; GLP
	EC10	EPA OTS 797.1050	0.28 mg/l	96 h	Pseudokirchneria subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	ECOSAR	1 mg/l		Pisces			QSAR
Long-term toxicity aquatic crustacea	NOEC	OECD 211	1.01 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EC50		5.4 mg/l	5 minutes	Photobacterium phosphoreum	Static system	Salt water	Experimental value; Nominal concentration
	EC50	Equivalent to OECD 209	500 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

barium sulfate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity crustacea	EC50		32 mg/l	48 h	Daphnia magna			Barium ion
Toxicity algae and other aquatic plants	NOEC	OECD 201	≥ 1.92 mg/l	72 h	Pseudokirchneria subcapitata	Static system	Fresh water	Experimental value
Long-term toxicity aquatic crustacea	NOEC	OECD 211	2.90 mg/l	3 week(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value
Toxicity aquatic micro-organisms	EC50	OECD 209	> 1000 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

	Parameter	Method	Value	Duration	Species	Value determination
Toxicity soil macro-organisms	NOEC		1800 mg/kg soil dw	21 day(s)	Enchytraeus sp.	Experimental value

1,4-dihydroxybenzene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	0.638 mg/l	96 h	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	Equivalent to OECD 202	0.061 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	0.33 mg/l	72 h	Pseudokirchneria subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC	Equivalent to OECD 201	0.019 mg/l	72 h	Pseudokirchneria subcapitata	Static system	Fresh water	Experimental value; Growth rate
Toxicity aquatic micro-organisms	IC50		71 mg/l	2 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

styrene

Biodegradation water

Method	Value	Duration	Value determination
ISO 9408	70.9 % - 100 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	7.2 h	500000 /cm ³	Experimental value

Biodegradation soil

Method	Value	Duration	Value determination
	16 % - 62 %	33 day(s)	Experimental value

NOVABLACK MAGIC

1,4-dihydroxybenzene

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	70 %; Oxygen consumption	14 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	16.58 h	500000 /cm ³	Calculated value

Biodegradation soil

Method	Value	Duration	Value determination
	100 %	1 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
			Data waiving

Conclusion

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVABLACK MAGIC

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

styrene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		35.5		Carassius auratus	Literature study

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		2.96	25 °C	Experimental value

barium sulfate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		68.4		Lepomis macrochirus	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

1,4-dihydroxybenzene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		40	72 h	Leuciscus idus	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		0.59	20 °C - 25 °C	Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

styrene

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.55	Estimated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	98.6 %	0 %	0.09 %	0.09 %	1.21 %	Calculated value

1,4-dihydroxybenzene

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.585	Experimental value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I					99.9 %	Experimental value

Conclusion

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

12 / 17

NOVABLACK MAGIC

Contains component(s) with potential for mobility in 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. Other adverse effects

NOVABLACK MAGIC

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

styrene

Groundwater

Groundwater pollutant

1,4-dihydroxybenzene

Groundwater

Groundwater pollutant

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).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Allow waste to solidify. Remove to an authorized dump (Class I). 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.

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

UN number	3269
-----------	------

14.2. UN proper shipping name

Proper shipping name	Polyester resin kit
----------------------	---------------------

14.3. Transport hazard class(es)

Hazard identification number	
Class	3
Classification code	F3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Rail (RID)

14.1. UN number

UN number	3269
-----------	------

14.2. UN proper shipping name

Proper shipping name	Polyester resin kit
----------------------	---------------------

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

13 / 17

NOVABLACK MAGIC

14.3. Transport hazard class(es)

Hazard identification number	30
Class	3
Classification code	F3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14.1. UN number

UN number	3269
-----------	------

14.2. UN proper shipping name

Proper shipping name	Polyester resin kit
----------------------	---------------------

14.3. Transport hazard class(es)

Class	3
Classification code	F3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Sea (IMDG/IMSBC)

14.1. UN number

UN number	3269
-----------	------

14.2. UN proper shipping name

Proper shipping name	Polyester resin kit
----------------------	---------------------

14.3. Transport hazard class(es)

Class	3
-------	---

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Annex II of MARPOL 73/78	Not applicable, based on available data
--------------------------	---

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	3269
-----------	------

14.2. UN proper shipping name

Proper shipping name	Polyester resin kit
----------------------	---------------------

14.3. Transport hazard class(es)

Class	3
-------	---

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	A66
--------------------	-----

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

14 / 17

NOVABLACK MAGIC

Special provisions	A163
Limited quantities: maximum net quantity per packaging	5 kg

SECTION 15: Regulatory information

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

European legislation:

European drinking water standards (Directive 98/83/EC)

barium sulfate

Parameter	Parametric value	Note	Reference
Sulphate	250 mg/l		Listed in Annex I, Part C, of Directive 98/83/EC on the quality of water intended for human consumption.

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.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
styrene	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'
styrene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopie" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only". 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

National legislation Belgium

NOVABLACK MAGIC

No data available

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

15 / 17

NOVABLACK MAGIC

styrene

Résorption peau	Styrène (monomère); 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

NOVABLACK MAGIC

Waterbezwaarlijkheid	B (2)
----------------------	-------

styrene

SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	styreen; 2; Suspected of damaging the unborn child.
--	---

National legislation France

NOVABLACK MAGIC

No data available

styrene

Catégorie toxique pour la reproduction	Styrène; R2
Risque de pénétration percutanée	Styrène; PP

1,4-dihydroxybenzene

Catégorie cancérigène	Hydroquinone; C2
Catégorie mutagène	Hydroquinone; M2

National legislation Germany

NOVABLACK MAGIC

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) of 18 April 2017
-----	---

styrene

TA-Luft	5.2.5; I
TRGS900 - Risiko der Fruchtschädigung	Styrol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

1,4-dihydroxybenzene

TA-Luft	5.2.5; I
---------	----------

National legislation United Kingdom

NOVABLACK MAGIC

No data available

Other relevant data

NOVABLACK MAGIC

No data available

styrene

IARC - classification	2B; Styrene
TLV - Carcinogen	Styrene, monomer; A4

1,4-dihydroxybenzene

Skin Sensitisation	Hydroquinone; SEN; Sensitization
IARC - classification	3; Hydroquinone
TLV - Carcinogen	Hydroquinone; A3

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361d Suspected of damaging the unborn child.
- H372 Causes damage to organs (ears (hearing damage)) through prolonged or repeated exposure if inhaled.
- H372 Causes damage to organs (hearing organs) through prolonged or repeated exposure if inhaled.
- H400 Very toxic to aquatic life.

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

16 / 17

NOVABLACK MAGIC

H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
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

M-factor

1,4-dihydroxybenzene	10		CLP Annex VI (ATP 1)
----------------------	----	--	----------------------

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, 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. Old versions must be destroyed. 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.

Reason for revision: 2, 3

Publication date: 2000-05-26

Date of revision: 2018-03-05

Revision number: 1100

Product number: 32508

17 / 17