

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

1.1. Product identifier

Product form : Mixture
 Product name : PRA794-P-SH194000
 Product code : SH194000
 Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : For professional use only
 Industrial/Professional use spec : Industrial
 Polyurethane resin

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SYNTHENE
 Ferme de l'Evêché CS20308
 60723 Pont Sainte Maxence Cedex - FRANCE
 T 33 344 31 72 00 - F 33 157 67 44 58
qual@synthene.com - www.synthene.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302
 Skin Sens. 1 H317
 Aquatic Acute 1 H400
 Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

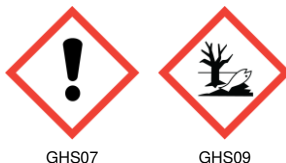
Xn; R22
 R43
 N; R50/53

Full text of R-phrases: see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) : Warning
 Hazardous ingredients : 6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine
 Hazard statements (CLP) : H302 - Harmful if swallowed
 H317 - May cause an allergic skin reaction
 H410 - Very toxic to aquatic life with long lasting effects
 Precautionary statements (CLP) : P273 - Avoid release to the environment
 P280 - Wear protective gloves, protective clothing, eye protection

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P301+P312 - IF SWALLOWED: Call a POISON CENTER, a doctor if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of water, soap
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	(CAS No) 106264-79-3 (EC no) 403-240-8 (EC index no) 612-113-00-8 (REACH-no) 01-0000015292-76	50 - 80	Xn; R22 R43 N; R50/53	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
bis(isopropyl)naphthalene	(CAS No) 38640-62-9 (EC no) 254-052-6 (REACH-no) 01-2119565150-48	10 - 20	R53	Asp. Tox. 1, H304 Aquatic Chronic 4, H413
Red phosphorus	(CAS No) 7723-14-0 (EC no) 231-768-7 (EC index no) 015-002-00-7	5 - 10	F; R11 R16 R52/53	Flam. Sol. 1, H228 Aquatic Chronic 3, H412
4-Methylpentan-2-one substance with a Community workplace exposure limit	(CAS No) 108-10-1 (EC no) 203-550-1 (EC index no) 606-004-00-4 (REACH-no) 01-2119473980-30	0,5 - 1	F; R11 Xn; R20 Xi; R36/37 R66	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335
Solvent naphta light aromatic (low boiling point)	(CAS No) 64742-95-6 (EC no) 265-199-0 (EC index no) 649-356-00-4 (REACH-no) 01-2119486773-24	0,5 - 1	Xn; R65 Xi; R37 N; R51/53 R10 R66 R67	Asp. Tox. 1, H304 Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation	: May cause an allergic skin reaction.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Carbon dioxide. Water spray. Dry powder.
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5.2. Special hazards arising from the substance or mixture

No additional information available

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5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Shovel into suitable and closed container for disposal. Store away from other materials. Dispose of this material and its container to hazardous or special waste collection point.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Heat. Keep away from ignition sources. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use. Keep container below 50°C in a well ventilated place. Keep away from food, drink and animal feedingstuffs. Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction.
- Incompatible products : Strong acids. Strong oxidizers.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

4-Methylpentan-2-one (108-10-1)		
EU	IOELV TWA (mg/m ³)	83 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m ³)	208 mg/m ³
EU	IOELV STEL (ppm)	50 ppm
France	VME (mg/m ³)	83 mg/m ³
France	VME (ppm)	20 ppm
France	VLE (mg/m ³)	208 mg/m ³
France	VLE (ppm)	50 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	104 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	208 mg/m ³

8.2. Exposure controls

- Personal protective equipment : Gloves. Safety glasses. Protective clothing.

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Hand protection	: PVC or other plastic material gloves
Eye protection	: Chemical goggles or safety glasses
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment



Other information	: Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: Characteristics.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1,2
Solubility	: Insoluble in water. Soluble in organic solvents. Hydrocarbon.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 1500 mPa.s
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Explosive when mixed with oxidizing substances.

10.3. Possibility of hazardous reactions

Exothermic reaction on contact with : Isocyanates. Aromatic.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

Sulphur oxides. Carbon oxides (CO, CO₂). Carbon monoxide. Nitrogen oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

4-Methylpentan-2-one (108-10-1)	
LD50 oral rat	2080 mg/kg
LD50 oral	> 2080 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LD50 dermal	5990 mg/kg bodyweight
LC50 inhalation rat (mg/l)	8,2 - 16,4 mg/l/4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 8200 mg/m ³
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine (106264-79-3)	
LD50 oral rat	> 1515 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Red phosphorus (7723-14-0)	
LD50 oral	> 2000 mg/kg
bis(isopropyl)naphthalene (38640-62-9)	
LD50 oral rat	> 4000 mg/kg
LD50 dermal rat	> 4000 mg/kg
LC50 inhalation rat (mg/l)	> 5,6 mg/l/4h

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

4-Methylpentan-2-one (108-10-1)	
LC50 fish 1	> 179 mg/l
EC50 other aquatic organisms 1	> 200 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine (106264-79-3)	
LC50 fish 1	7,3 mg/l
EC50 Daphnia 1	0,9 mg/l
bis(isopropyl)naphthalene (38640-62-9)	
LC50 fish 1	0,5 mg/l
EC50 Daphnia 1	> 0,16 mg/l
EC50 other aquatic organisms 1	0,15 mg/l

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12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment. Not readily biodegradable.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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4-Methylpentan-2-one (108-10-1)

Log Pow	1,31
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12.4. Mobility in soil

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Ecology - soil	low mobility.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information	: Avoid release to the environment. Do not contaminate ground and surface water
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: This material and its container must be disposed of as hazardous waste. Dispose in a safe manner in accordance with local/national regulations.
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Ecology - waste materials	: Avoid release to the environment. Do not dispose of waste into sewer.
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SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: 3082
UN-No. (IMDG)	: 3082
UN-No.(IATA)	: 3082
UN-No.(ADN)	: 3082
UN-No. (RID)	: 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine(106264-79-3)), 9, III, (E)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9



IMDG

Transport hazard class(es) (IMDG)	: 9
Danger labels (IMDG)	: 9

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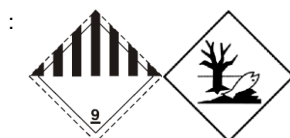
IATA

Transport hazard class(es) (IATA)

: 9

Hazard labels (IATA)

: 9



ADN

Transport hazard class(es) (ADN)

: 9



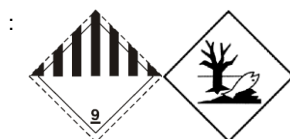
RID

Transport hazard class(es) (RID)

: 9

Danger labels (RID)

: 9



14.4. Packing group

Packing group (ADR)

: III

Packing group (IMDG)

: III

Packing group (IATA)

: III

Packing group (ADN)

: Not applicable

Packing group (RID)

: Not applicable

14.5. Environmental hazards

Dangerous for the environment

: Yes

Marine pollutant

: Yes

Other information

: No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR)

: M6

Special provisions (ADR)

: 274, 335, 601

Limited quantities (ADR)

: 5I

Excepted quantities (ADR)

: E1

Packing instructions (ADR)

: P001, IBC03, LP01, R001

Special packing provisions (ADR)

: PP1

Mixed packing provisions (ADR)

: MP19

Portable tank and bulk container instructions (ADR)

: T4

Portable tank and bulk container special provisions (ADR)

: TP1, TP29

Tank code (ADR)

: LGBV

Vehicle for tank carriage

: AT

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Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: •3Z

- Transport by sea

Special provisions (IMDG)	: 274, 335
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

- Air transport

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

- Inland waterway transport

Not subject to ADN	: No
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- Rail transport

Carriage prohibited (RID)	: No
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

VwVwS Annex reference	: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

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Netherlands

SZW-lijst van kankerverwekkende stoffen : Solvent naphta light aromatic (low boiling point) are listed
SZW-lijst van mutagene stoffen : Solvent naphta light aromatic (low boiling point) are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H228	Flammable solid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R11	Highly flammable
R16	Explosive when mixed with oxidizing substances
R20	Harmful by inhalation
R22	Harmful if swallowed
R36/37	Irritating to eyes and respiratory system
R37	Irritating to respiratory system

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R43	May cause sensitisation by skin contact
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product