

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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RonaFloor HB Vertical Grade Part A

Revision 2

Revision date 2012-05-02

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

1.1. Product identifier

Product name	RonaFloor HB Vertical Grade Part A
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PROC5] Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact); [ERC5] Industrial use resulting in inclusion into or onto a matrix; [AC4] Stone, plaster, cement, glass and ceramic articles;
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1.3. Details of the supplier of the safety data sheet

Company	Ronacrete Limited
Address	Ronac House Flex Meadow Harlow Essex CM19 5TD United Kingdom
Web	www.ronacrete.co.uk
Fax	+44 (0) 1279 638701
Email	technical@ronacrete.co.uk

1.4. Emergency telephone number



Emergency telephone number	+44 (0) 1279 638700 Daytime
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xi; R36/38-43 N; R51/53
Main hazards	Symbols: Xi: Irritant. N: Dangerous for the environment. Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Symbols	Xi: Irritant. N: Dangerous for the environment.  
Risk phrases	R36/38 - Irritating to eyes and skin. R43 - May cause sensitisation by skin contact. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S24 - Avoid contact with skin. S29 - Do not empty into drains.

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2.2. Label elements

S37 - Wear suitable gloves.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

Other hazards

Not classified as flammable but will burn.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
4,4'-Isopropylidenediphenol Epichlorhydrin reaction product (number average molecular weight =700)	603-074-00-8	25068-38-6	500-033-5			Xi; R36/38 R43 N; R51/53
Bisphenol F Epichlorohydrin reaction product		28064-14-4				Xi; R36/38-43 N; R51/53
Aliphatic Glycidylether		68081-84-5				Xi; R36/38-43 N; R51/53

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact

May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention.

Skin contact

May cause irritation to skin. Remove contaminated clothing. Drench the affected skin with clean running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Ingestion

May cause irritation to mucous membranes. DO NOT INDUCE VOMITING. Seek medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Foam. Water spray. Cool fire exposed containers with waterspray. Do NOT use water jet.

5.2. Special hazards arising from the substance or mixture

Not classified as flammable but will burn. Carbon monoxide may evolve if incomplete combustion occurs.

5.3. Advice for firefighters

Wear full protective clothing and self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. Ensure adequate ventilation of the working area. Keep personnel away from spill.

6.2. Environmental precautions

Contain spillage and do not allow to contaminate soil and drains or watercourses. If material enters drains it should be pumped out into an open vessel, emergency services should be called to assist in the operation.

6.3. Methods and material for containment and cleaning up

Small spillages: absorb into dry earth or sand. Transfer to a closable, labelled container for disposal by an appropriate method. Put leaking containers into a larger container or over container and secure lid. Label outer container identifying the substance.
Large spillages: Transfer to a labelled container for product recovery or appropriate disposal, otherwise treat as a small spill.

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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area.
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7.2. Conditions for safe storage, including any incompatibilities

	Keep containers tightly closed. Store in a cool, dry area.
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SECTION 8: Exposure controls/personal protection**8.2. Exposure controls****8.2.1. Appropriate engineering controls**

	Ensure adequate ventilation of the working area.
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8.2.2. Individual protection measures

	Adopt best Manual Handling considerations when handling, carrying and dispensing.
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Eye / face protection

	Eye protection. Eye wash bottle with water.
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Skin protection -

	Butyl rubber gloves. Chemical resistant gloves (PVC). Neoprene gloves. Nitrile rubber gloves.
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Handprotection**Skin protection - Other**

	Wear suitable protective clothing. Wear waterproof rubber footwear such as Wellington boots.
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Respiratory protection

	Wear a mask.
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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

State	Liquid
Colour	Yellow
Odour	Mild
Boiling point	150
Flash point	above 150
Relative density	1.12

SECTION 10: Stability and reactivity**10.2. Chemical stability**

	Stable under normal conditions. Reacts with strong oxidising agents.
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10.3. Possibility of hazardous reactions

	Polymerises exothermically with amines, mercaptans and Lewis Acids at ambient temperature. Reacts exothermically with bases, ammonia, primary and secondary amines, alcohols and acids.
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10.5. Incompatible materials

	Strong mineral acids. Caustic Soda can induce vigorous polymerisation at temperatures around 200C.
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10.6. Hazardous decomposition products

	Hazardous decomposition products are not expected to form during normal storage.
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SECTION 11: Toxicological information**11.1. Information on toxicological effects****Germ cell mutagenicity**

	No mutagenic effects reported.
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11.1.4. Toxicological Information

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11.1.4. Toxicological Information

4,4'-Isopropylidenediphenol Epichlorhydrin reaction product (number average molecular weight =700)	Dermal Rat LD50: 2000 mg/kg	Dermal Rabbit LD50: 2000 mg/kg
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11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

May cause sensitisation by inhalation and skin contact.

SECTION 12: Ecological information

12.1. Toxicity

4,4'-Isopropylidenediphenol Epichlorhydrin reaction product (number average molecular weight =700)	Fish LC50/96h: 2.4000 mg/l
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May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

Substance has a bioaccumulation potential.

12.4. Mobility in soil

Sinks in water. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.

SECTION 13: Disposal considerations

General information

Recover or recycle if possible, incinerate. Contact a licensed waste disposal company.

Disposal methods

Transfer to a suitable container and arrange for collection by a specialised disposal company.

Disposal of packaging

Drain container thoroughly. Rinse three times with suitable solvent. Treat rinsings as for product disposal. After draining, vent in a safe place away from sparks and fire. Where practical, containers and packaging should be recycled by a licensed contractor. Arrange for collection by disposal company.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

UN3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Liquid Epoxy Resin, Aliphatic Glycidyl Ether)

14.3. Transport hazard class(es)

ADR/RID	9
Subsidiary risk	-
IMDG	9

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14.3. Transport hazard class(es)

Subsidiary risk	-
IATA	9
Subsidiary risk	-

14.4. Packing group

Packing group	III
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14.5. Environmental hazards

Environmental hazards	Yes
Marine pollutant	Yes

ADR/RID

Hazard ID	90
Tunnel Category	(E)

IMDG

EmS Code	F-A S-F
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IATA

Packing Instruction (Cargo)	964
Maximum quantity	450 L
Packing Instruction (Passenger)	964
Maximum quantity	450 L

SECTION 15: Regulatory information

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

Regulations	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas: 8 - Respiratory protection.
Text of risk phrases in Section 3	R36/38 - Irritating to eyes and skin. R43 - May cause sensitisation by skin contact. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
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RonaFloor HB Vertical Grade Part B

Revision 1

Revision date 2012-05-02

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

1.1. Product identifier

Product name	RonaFloor HB Vertical Grade Part B
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PROC5] Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact); [ERC5] Industrial use resulting in inclusion into or onto a matrix; [AC4] Stone, plaster, cement, glass and ceramic articles;
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1.3. Details of the supplier of the safety data sheet

Company	Ronacrete Limited
Address	Ronac House Flex Meadow Harlow Essex CM19 5TD United Kingdom
Web	www.ronacrete.co.uk
Fax	+44 (0) 1279 638701
Email	technical@ronacrete.co.uk

1.4. Emergency telephone number


Emergency telephone number	+44 (0) 1279 638700 Daytime
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	C; R34 Xn; R20/22-62-63 Xi; R43 N; R51/53
Main hazards	Symbols: C: Corrosive. N: Dangerous for the environment. Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility. Possible risk of harm to the unborn child.

2.2. Label elements

Symbols	C: Corrosive. N: Dangerous for the environment. 
Risk phrases	R20/22 - Harmful by inhalation and if swallowed. R34 - Causes burns. R43 - May cause sensitisation by skin contact. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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2.2. Label elements

Safety phrases	R62 - Possible risk of impaired fertility.
	R63 - Possible risk of harm to the unborn child.
	S24 - Avoid contact with skin.
	S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28 - After contact with skin, wash immediately with plenty of clean water.
	S29 - Do not empty into drains.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.	
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).	

2.3. Other hazards

Other hazards	Components of product may affect nervous system. May cause sensitisation by skin contact. Irritating to eyes and respiratory system.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Benzyl alcohol	603-057-00-5	100-51-6	202-859-9			Xn; R20/22
Nonylphenol	601-053-00-8	25154-52-3	246-672-0			Repr. Cat. 3; R62-63 Xn; R22 C; R34 N; R50/53
Trimethylhexane-1,6-Diamine		25620-58-0				
m-Phenylenebis(methylamine)		1477-55-0	216-032-5			T; R23 C; R34 Xn; R21/22 Xi; R43 R52/53
4-Tert-Butylphenol		98-54-4				

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	May cause lung irritation. Components of product may affect nervous system. Headache. Nausea. Dizziness. Confusion. Breathing difficulties. Overexposure can cause respiratory failure. May cause irritation to respiratory system.
Eye contact	Vapor can cause glaucoma.
Skin contact	Components of product may affect nervous system. Headache. Nausea. Dizziness. Confusion. Breathing difficulties.
Ingestion	Components of product may affect nervous system. Headache. Nausea. Vomiting. Abdominal Pain. Dizziness. Confusion. Breathing difficulties. Overexposure can cause respiratory failure.

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

Inhalation	Remove the affected person from the source of contamination immediately. If conscious, ensure the casualty sits or lies down. If breathing is difficult give oxygen. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
Eye contact	Rinse immediately with plenty of water for 15 minutes. Transfer to hospital for specialist examination.
Skin contact	Remove all contaminated clothes and footwear immediately unless stuck to skin. Rinse immediately with plenty of water for 15 minutes. Transfer to hospital if there are burns or symptoms of poisoning. Note to physicians: Application of corticosteroid cream has been effective in treating skin irritation.
Ingestion	Drink 1 to 2 glasses of water. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. DO NOT INDUCE VOMITING. Transfer to hospital as soon as possible.

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Revision 1

Revision date 2012-05-02

SECTION 5: Firefighting measures**5.1. Extinguishing media**Alcohol resistant foam. Carbon dioxide (CO₂). Dry Powder. Sand.**5.2. Special hazards arising from the substance or mixture**Evacuate personnel to a safe area. Burning produces irritating, toxic and obnoxious fumes. Use of water may result in the formation of very toxic aqueous solutions. By fire, toxic gases (CO, CO₂, NO_x) may be formed. Ammonia. Do not allow runoff water to enter sewers or drains.**5.3. Advice for firefighters**

Wear full protective clothing and self contained breathing apparatus. Retain expended liquids from fire fighting for later disposal.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear self contained breathing apparatus and protective clothing. Wear suitable gloves and eye/face protection. Evacuate the area immediately. Ensure adequate ventilation of the working area.

6.2. Environmental precautions

Contain spillage and do not allow to contaminate soil and drains or watercourses.

6.3. Methods and material for containment and cleaning up

Transfer to suitable, labelled containers for disposal. Wear chemical protective clothing. Butyl rubber - IIR (). Self-contained breathing apparatus must be used in handling.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Provide eye wash station. Provide safety showers. Do not breathe vapours. Avoid contact with eyes and skin. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area.

7.2. Conditions for safe storage, including any incompatibilities

Do not store with. Acids. Keep container tightly closed. Keep in a cool, dry, well ventilated area. Do NOT allow to freeze.

Suitable packaging

Do not store in reactive metal containers.

SECTION 8: Exposure controls/personal protection**8.2. Exposure controls****8.2.1. Appropriate engineering controls**

Provide eye wash station. Provide safety showers. Ensure adequate ventilation of the working area.

Skin protection - Hand protection

Neoprene gloves. Polyvinyl chloride - PVC (). Butyl rubber - IIR (). Nitrile rubber - NBR (). Impermeable gloves recommended. Chemical resistant disposable gloves are recommended as they promote regular changing.

Skin protection - Other

Wear suitable protective clothing. Dispose of contaminated leather articles. Wash at the end of each work shift and before eating, smoking or using the toilet.

Respiratory protection

Do not breathe gas/fumes/vapour/spray. Wear a mask.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

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9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Yellow
Odour	Ammoniacal
Boiling point	> 200 °C
Flash point	> 100 °C
Relative density	0.99 (Water = 1 @ 20 °C)

SECTION 10: Stability and reactivity

10.2. Chemical stability

	Stable under normal conditions.
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10.5. Incompatible materials

	Reactive metals, materials reactive with hydroxyl compounds. CAUTION! N-Nitrosamines, many of which are potent carcinogens, may be formed when the product comes into contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Mineral and Organic acids, oxidising agents. Product slowly corrodes copper, zinc, aluminium and galvanized surfaces. Peroxides. Oxidising agents.
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10.6. Hazardous decomposition products

	Ammonia. By fire, toxic gases (CO, CO ₂ , NO _x) may be formed. Hydrocarbons.
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SECTION 11: Toxicological information

11.1.4. Toxicological Information

4-Tert-Butylphenol	Oral Rat LD50: 2951mg/kg	Dermal Rabbit LD50: 2288mg/kg
Benzyl alcohol	Inhalation Rat LC50/4 h: 4.2 mg/l Oral Mouse LD50: 1040 mg/kg	Oral Rat LD50: 1230 mg/kg Dermal Rabbit LD50: 2000 mg/kg
m-Phenylenebis(methylamine)	Inhalation Rat LC50/4 h: 2.4 mg/l Dermal Rabbit LD50: 2000 mg/kg	Oral Rat LD50: 930 mg/kg
Nonylphenol	Oral Rat LD50: 1200 mg/kg	
RonaFloor HB Vertical Grade Part B	Oral Rat LD50: 2951mg/kg	
Trimethylhexane-1,6-Diamine	Oral Rat LD50: 910mg/kg	

SECTION 12: Ecological information

12.1. Toxicity

Benzyl alcohol	Green algae EC50/96h: 640 mg/l Bluegill sunfish LC50/96h: 10 mg/l	Fathead minnows LC50/96h: 460 mg/l
m-Phenylenebis(methylamine)	Daphnia EC50/48h: 16.0000 mg/l	Rainbow trout LC50/96h: 100 mg/l
RonaFloor HB Vertical Grade Part B	Algae IC50/72h: 700 mg/l	Fish LC50/96h: 10 mg/l

12.2. Persistence and degradability

	No data available.
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12.3. Bioaccumulative potential

	No data is available on this product.
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12.4. Mobility in soil

	No data available.
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SECTION 13: Disposal considerations

General information

	Waste from residue/unused: Contact supplier if guidance is required.
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Disposal of packaging

RonaFloor HB Vertical Grade Part B

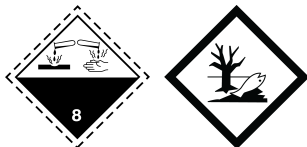
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Disposal of packaging

Dispose of as special waste in compliance with local and national regulations.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

UN2735

14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE N.O.S. (Benzene-1,3-dimethanamine (MXDA))

14.3. Transport hazard class(es)

ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8
Subsidiary risk	-

14.4. Packing group

Packing group	II
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14.5. Environmental hazards

Environmental hazards	Yes
Marine pollutant	Yes

ADR/RID

Hazard ID	80
Tunnel Category	(E)

IMDG

EmS Code	F-A S-B
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IATA

Packing Instruction (Cargo)	855
Maximum quantity	30 L
Packing Instruction (Passenger)	851
Maximum quantity	1 L

SECTION 15: Regulatory information

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

Regulations	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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SECTION 16: Other information

Other information

RonaFloor HB Vertical Grade Part B

Revision 1

Revision date 2012-05-02

Other information

Revision	This document differs from the previous version in the following areas: 8 - Respiratory protection.
Text of risk phrases in Section 3	R20/22 - Harmful by inhalation and if swallowed. R21/22 - Harmful in contact with skin and if swallowed. R22 - Harmful if swallowed. R23 - Toxic by inhalation. R34 - Causes burns. R36/37/38 - Irritating to eyes, respiratory system and skin. 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. R62 - Possible risk of impaired fertility. R63 - Possible risk of harm to the unborn child.

Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
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