

**SAFETY DATA SHEET**

conform 1907/2006/EC

Date of issue: 14 May 2008, version 1  
Commercial product name: DRY SHIELD® SK B  
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**1. Identification of the substance / preparation and the company / undertaken.**

Product name and code: DRY SHIELD® SK B  
Material uses: Component of elastic wood stabilizer.  
Identification company: Repair Care International B.V.  
Cartografenweg 34  
5141 MT Waalwijk  
The Netherlands  
Postbus 273  
5140 AG Waalwijk  
The Netherlands  
Tel: + 31(0) 416 650095  
Fax: + 31(0) 416 652024  
E - mail: [info@repair-care.com](mailto:info@repair-care.com)  
URL: [www.repair-care.com](http://www.repair-care.com)  
Emergency telephone number: England & Wales – NHS Direct (24 hours), tel. 0845 46 47  
[www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)  
Scotland – NHS 24 (24 hours), tel. 08454 24 24 24  
[www.nhs24.co.uk](http://www.nhs24.co.uk)

**2. Hazard identification.**

The preparation is classified in accordance with Directive 1999/45/EC or Directive 67/548/EEC and its amendments.

C	Corrosive.
N	Dangerous for the environment.
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.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.

Pregnant women are advised no to work with this product.  
Toxic for reproduction: Repr. Cat. 3.

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### 3. Composition / information on ingredients.

Ingredient	% weight	danger	CAS#	EC#	REACH#
M-phenylenebis(methylamine)	40 - 60	Xn; R20/22 C; R34 R43 R52/53	1477-55-0	216-032-5	-
2-Piperazin-1-ylethylamine	< 20	Xn; R21/22 C; R34 R43 R52/53	140-31-8	205-411-0	-
2,4,6-Tri(dimethylaminomethyl)phenol	< 20	Xn; R22 Xi; R36/38	90-72-2	202-013-9	-
Nonylphenol 4-nonylphenol-, branched	< 20	Xn; R22 C; R34 N; R50-53 Repr. Cat. 3; R62 Repr. Cat. 3; R63	25154-52-3	246-672-0	-

The full text of each relevant R phrase can be found in heading 16.

### 4. First – aid measures.

General:	In the event of an accident or when feeling unwell consult a physician without delay.
Eye contact:	Exposure causes irritation to the eyes. Remove contact lenses, and rinse with water while keeping the eyelids open for at least 15 minutes. Assist the victim with rinsing. Consult an optometrist.
Skin contact:	Remove contaminated clothing. Rinse immediately with plenty of water (at least 15 minutes) and then wash with water and soap, if available. Take a shower if necessary. Consult a dermatologist.
Swallowing:	Provided the patient is conscious, rinse mouth with water and drink minimum 2 glasses of water. DO NOT induce patient to vomit. Obtain immediate medical assistance or take the victim directly to the hospital. The person should be placed and kept in the recovery position if unconscious.
If aerosol or vapour is inhaled in high concentrations:	Take the person into the fresh air and keep him/her warm. Allow the person to rest in a semi-seated position. Consult a physician. Administer if necessary supplemental oxygen.
Further medical treatment:	Symptomatic treatment and supportive therapy as prescribed.

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**5. Fire – fighting measures.**

Suitable extinguishing media:	CO <sub>2</sub> , (alcohol resistant) foam, dry powder, water spray or sand should be used.
Never use direct water jet. Extinguishing media which must not be used for safety reasons: Water jet.	
Unusual fire/explosion hazards:	Not classified as flammable. If involved in a fire, it may emit noxious and toxic fumes. Decomposition products may be a hazard to health. Combustion products may include carbon monoxide and carbon dioxide. Evacuate the area except first aid staff, remain above the wind.
Special protective equipment for fire fighters:	Self contained breathing apparatus and full protective clothing to be worn under fire fighting conditions. Only use qualified personnel who are well aware of the dangers of this product. Acid resistant protective equipment must be worn in the vicinity of the fire. Clean the equipment thoroughly after use (shower, clean and check clothing thoroughly).
Additional information:	Prevent washings from entering the sewer system.

**6. Accidental release measures.**

Personal precautions:	Ensure acid protective clothing and respiratory protection, <u>including self-contained breathing apparatus</u> , is worn when cleaning up spillage. Keep up strict hygiene. Ventilate and evacuate the area. Can form gasses heavier than air. Explosive mixtures may form when exposed to air.
Environmental precautions:	Do not discharge as a concentrate into drains, sewers or surface water. Construct a dike to prevent spreading.
Cleaning methods:	Contain spill with sand, ground or other non-flammable absorption material. Collect the waste product in suitable drums for disposal.

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**7. Handling and storage.**

**Handling:** When handling observe the usual precautionary measures for chemicals. Do not inhale vapours and avoid contact with the material. Use only in well-ventilated areas. Blend the product on a stable place and prevent spill of the product during processing. Good housekeeping standards and regular safe removal of waste materials will minimize risks.

**Storage:** Keep container tightly closed in a cool and well ventilated place. Keep separated from foodstuffs and animal foods. Prevent product temperatures rising above 25 °C and under 5 °C. Keep separate from strong acids, strong mineral acids.

**Storage material:**

- suitable: Original packaging, plastic.
- unsuitable: Aluminium, zinc, brass, iron.

**Storage temperature:** Recommended storage temperature 15 ± 10 °C.

**Specific use(s):** Elastic, hand applied adhesive sealing compound, with / without application of fibreglass technology.

**8. Exposure controls / personal protection.**

**Exposure limits.**

Ingredient name	Occupational exposure limits UK as TWA (8 hrs.) in mg / m <sup>3</sup> :			Remark
	MAC (UK,2006)	NIOSH	others	
M-phenylenebis(methylamine)	-	0,1	-	skin (supplier)

**Personal protection:** Do not smoke, eat or drink whilst working. Wear suitable protective clothing (preferably plasticized cotton or an apron). Eating, drinking and smoking are prohibited in areas where this material is handled and stored.

**Respiratory protection:** Adequate ventilation (ventilation factor > 1), if possible supported with suction at the source.

**Skin and body:** Wear suitable protective clothing (preferably an apron in combination with in combination with work sleeves and overall or protecting clothing for once-only use), gloves and eye/face protection. Remove contaminated clothing immediately. Keep working clothes separate (on location e.g. in a closed plastic bag) and change daily. Cotton as working clothes is because of penetrability less preferable, use cotton in combination with a plastic protection. Inform at the clothing supplier to the breakthrough time for epoxy products.

**Hands:** Wash hands well before breaks and at the end of work. Gloves should be worn to avoid contact with skin. For repeated or long term use, use gloves made from nitrile rubber (> 0,4 mm) or neoprene. Do not use vinyl, cotton or natural rubber.

**Eyes:** Chemical safety glasses (also if small quantities are processed). Eyewash fountain must be nearby (if possible). Full face shield if splashing may occur.



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**9. Physical and chemical properties.**

## General information.

Appearance: Liquid.  
Colour: Light yellow.  
Odour: Characteristic, pervasive.

## Important health, safety and environmental information

pH: Not available.  
Boiling point: > 100 °C.  
Solidification point: < 0 °C.  
Flash point: > 100 °C.  
Explosive properties: No limits determined.  
Vapour pressure: 0,07 mbar at 20 °C for nonphenol.  
Relative density: 1,03 (water = 1).  
Solubility in water: Partly miscible.  
Viscosity: 50 - 150 mPa.s.  
Vapour density: > 1 (air = 1).  
Evaporation rate: Slower than ether.

**10. Stability and reactivity.**

Stability: Stable at room temperature.  
Conditions to avoid: Avoid high (> 25 °C) and low (< 5 °C) temperatures.  
Materials to avoid: Oxidisers, acids, chlorohydrocarbons and strong mineral acids.  
Attacks copper and copper alloys.  
Hazardous decomposition products: Unlikely under normal industrial use and at operating temperatures. Contains nonylphenol and 2-piperazin-1-ylethylamine which decomposes at higher temperatures and can form toxic fumes.

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**11. Toxicological information.**

Acute toxicity from the components:

Product information:	M-phenylenebis(methylamine).
LD <sub>50</sub> (oral, rat):	930 mg / kg.
LD <sub>50</sub> (dermal, rabbit):	2.000 mg / kg.
Guinea pig:	sensitisation in 7 of 10 animals (intradermal induction - 0.1%; topical induction - 10%; challenge - 2% & 1%).
Product information:	2-Piperazin-1-ylethylamine.
LD <sub>50</sub> (oral, rat):	1.470 - 2.140 mg / kg.
LD <sub>50</sub> (dermal, rabbit):	880 - 1.260 mg / kg.
Product information:	2,4,6-Tri(dimethylaminomethyl)phenol.
LD <sub>50</sub> (oral, rat):	1.673 mg / kg.
LD <sub>50</sub> (dermal, rabbit):	1.242 mg / kg.
Product information:	Nonylphenol 4-nonylphenol-, branched.
LD <sub>50</sub> (oral, rat):	1.900 mg / kg.
LD <sub>50</sub> (dermal, rabbit):	2.140 mg / kg.
Product information:	Benzyl alcohol.
LD <sub>50</sub> (oral, rat):	1.610 mg / kg (1.000 ppm, 8 hrs.).
LD <sub>50</sub> (oral, rat):	3.100 mg / kg (4.178 mg / m <sup>3</sup> as aerosol, 4 hrs.).

The following health hazard assessment is based on an assessment of the composition of this product.

Effects on the eyes:	Irritating. Reddening, pain. Serious deep burns.
Effects on the skin:	Contact with the preparation may result in severe irritation, contact eczema, sensitisation, blisters, redness, pain. Burning feeling. Burns on the skin. Prolonged or repeated exposure in combination with other epoxy products may damage the skin and may cause irritation eczema. Skin contact can cause allergic contact dermatitis.
Effect on the respiratory organs:	Irritation of mucous membranes and respiratory tract. Painful throat. Burning feeling. Cough. Shortness of breathe.
Ingestion:	Painful throat. Burning feeling. Stomach-ache. Diarrhoea. Nausea. Shock. The inhalation of aerosols can cause serious damage.
Other:	Toxic for reproduction: Reproduction toxicity category 3. Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Preparation contains volatile organic compounds (VOC components), according to the criteria of the directive on VOC products (EU directive 1999/13). A volatile organic compound (VOC) mean any organic compound having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use.

The total amount in this preparation , 200 g. VOC / l (calculated value).

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**12. Ecological information.**

Ecotoxicity from the components.

Product information:	M-phenylenebis(methylamine).
LC <sub>50</sub> (fish, golden orfe):	130 mg / l.
EC <sub>10</sub> (bacteria, p. putida):	90 mg / l.
Product information:	2-Piperazin-1-ylethylamine.
LC <sub>50</sub> (fish, rainbow trout):	> 100 mg / l (24 hrs.), oncorhynchus mykiss.
EC <sub>50</sub> (daphnia magna):	32 mg / l.
Product information:	2,4,6-Tri(dimethylaminomethyl)phenol.
LC <sub>50</sub> (fish, rainbow trout):	222 mg / l (24 hrs.), oncorhynchus mykiss.
LC <sub>100</sub> (fish, rainbow trout):	240 mg / l (96 hrs.), oncorhynchus mykiss.
LC <sub>0</sub> (fish, rainbow trout):	180 mg / l (96 hrs.), oncorhynchus mykiss.
LC <sub>50</sub> (fish, carp):	249 mg / l (24 hrs.), cyprinus carpio.
LC <sub>50</sub> (fish, carp):	175 mg / l (96 hrs.), cyprinus carpio.
EC <sub>10</sub> :	718 mg / l (96 hrs.).
Product information:	Nonylphenol 4-nonylphenol-, branched.
LC <sub>50</sub> (fish, golden orfe):	0,9 mg / l (1/2 days), DIN 38412 part 15.
EC <sub>10</sub> (bacteria, p. putida):	16 mg / l (1/16 hrs. Bringmann-Kuhn test).
Biodegradation:	78 % CO <sub>2</sub> , Sturm test / OECD 301B.
Is marine pollutant. Accumulation of this substance can occur in the food chain of people, especially in fish and in food from the sea.	
Mobility:	The product is only partly soluble in water.
Persistence / degradability:	From the components poor biologically degradable.
Bioaccumulation:	No data.
Other harmful effects:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
WGK:	2 (Wassergefährdungsklasse or water pollution class, German Water Resources Act., water pollutant).

**13. Disposal considerations.**

Product waste:	Incinerate in a hazardous waste incinerator suitable for the disposal of noxious chemical waste in accordance with the stipulations of the relevant regulations. Waste generation should be avoided or minimised where ever possible. If this is not possible, destruction must take place in an approved facility which is equipped to absorb and neutralise acid gasses and other toxic processing products. Waste, even small quantities, should never be poured down drains, sewers or water surfaces.
Eural waste disposal code:	08 04 09*. WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS. Wastes from MFSU of adhesives and sealants (including waterproofing products) ; waste adhesives and sealants containing organic solvents or other dangerous substances. Classified as hazardous waste.
Empty containers:	May be reconditioned only after the contents have been completely removed.

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**14. Transport information.**

Classification as ADR material for road transport.

UN number: 3267.  
Proper shipping name: UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (mixture contains 2-piperazin-1-ylethylamine, m-phenylenebis(methylamine) and 2,4,6-tris(dimethylaminomethyl)phenol), 8, II.  
ADR class: 8.  
Hazard no.: 88.  
Packaging: II.



ADR label:  
Remark:

Supplier makes in normal circumstances use of the complete exemption in accordance with LQ22 rand number 3.4 of the ADR (maximum gross content for inner packaging 0,5 l and 1 l as combination packaging).

Classification as ICAO/IATA material for air transport.

UN number: 3267.  
Proper shipping name: UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (mixture contains 2-piperazin-1-ylethylamine, m-phenylenebis(methylamine) and 2,4,6-tris(dimethylaminomethyl)phenol), Class 8, II.  
Packaging instruction (1 L): 808 (passenger aeroplane).  
Packaging instruction (0,5 L): Y808 (passenger aeroplane).  
Packaging instruction (30 L): 812 (cargo aircraft).  
Class: 8.



ICAO/IATA label:

Classification as IMDG material for sea transport.

UN number: 3267.  
Name on transport document: UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (mixture contains 2-piperazin-1-ylethylamine, m-phenylenebis(methylamine) and 2,4,6-tris(dimethylaminomethyl)phenol), Class 8, PG II, MARINE POLLUTANT.

Class: 8.  
Maximum quantity: 1 litre.  
EmS: F-A / S-B.  
IMO label: -  
Packing and stowage: Category B. Stow "Separated from" quarters. "Not in the same area with" acids.  
Properties and observations: Causes burns on the skin, eyes and mucous membranes. Reacts violently with acids.

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### 15. Regulatory information.

EG classification.



EG hazard symbol:  
 Hazard description:

C Corrosive.

N Dangerous for the environment.

R – (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.

R62 Possible risk of impaired fertility.

R63 Possible risk of harm to the unborn child.

S – (safety) phrases:

S1/2 Keep locked up and out of the reach of children.

S24/25 Avoid contact with skin and eyes.

S28 After contact with skin, wash immediately with plenty of water and soap.

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).

S51 Use only in well-ventilated areas.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Additional regulation from EU legislation:

Contains epoxy constituents. See information supplied by the manufacturer.

WGK:

2 (Hazard to water, German regulation).

VOC content:

200 g / l of volatile organic compounds.

VOS subcategory:

h, type SG (Binding primers, limit value 750 g / l).

Additional warning:

Contains 2,4,6-tri(dimethylaminomethyl)phenol (index number 603-069-00-0), nonylphenol (index number 601-053-00-8) and 2-piperazin-1-ylethylamine (index number 612-105-00-4).

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**16. Other information.**

List of relevant R - phrases referred to under headings 2 and 3:

R20/22 - Harmful by inhalation and if swallowed.  
R21/22 - Harmful in contact with skin and if swallowed.  
R22 - Harmful if swallowed.  
R34 - Causes burns.  
R36/38 - Irritating to eyes 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.

History: Date of printing: 20 July 2009.  
Date of previous issue: No previous validation.  
Version: 1.

Information source: - IUCLID dataset substance ID: 1477-55-0, 18.02.2000;  
- IUCLID dataset substance ID: 90-72-2, 19.02.2000;  
- IUCLID dataset substance ID: 25154-52-3, 18.02.2000;  
- IUCLID dataset substance ID: 140-31-8, 18.02.2000;  
- EC directive 2001/838 on the results of the risk evaluation and the risk reduction strategies for the substances: acrylaldehyde; dimethyl sulphate; nonylphenol phenol, 4-nonyl-, branched; tert-butyl methyl ether.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the properties of the product. It is always the duty of users to determine the applicability of such information and recommendations and the suitability of any products for their own particular purpose.

Safety data sheet according regulation (EC) No 1907/2006 of the European parliament and of the council from 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH).

DRY SHIELD® is a trademark of Repair Care International B.V. .

**Annex.**

From the raw materials in this recipe, at the moment of drafting this safety data sheet, no chemical safety reports according to regulation (EC) no. 1907/2006 has been registered.