



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

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

1.1 Product identifier

Trade name **DRY FLEX® COOL - Component B**
not relevant (mixture)

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

Relevant identified uses professional use
Specific process or activity Elastic repair compound
Use product only in combination with component B
Uses advised against consumer uses

1.3 Details of the supplier of the safety data sheet

Repair Care
Cartografenweg 34
5140 AG Waalwijk
Netherlands

Telephone: +31 (0) 416 650095
Telefax: +31 (0) 416 652024
e-mail: info@repair-care.com
Website: www.repair-care.com
e-mail (competent person)

info@repair-care.com

1.4 Emergency telephone number

National Poisons Information Service (NPIS): 0844-8920111 (UK only) For medical professionals only.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Cat-egory	Hazard class and category	Hazard state-ment
3.1O	acute toxicity (oral)	Cat. 4	(Acute Tox. 4)	H302
3.2	skin corrosion/irritation	Cat. 1B	(Skin Corr. 1B)	H314
3.3	serious eye damage/eye irritation	Cat. 1	(Eye Dam. 1)	H318
3.4S	skin sensitisation	Cat. 1	(Skin Sens. 1)	H317
3.7	reproductive toxicity	Cat. 2	(Repr. 2)	H361f
4.1A	hazardous to the aquatic environment - acute hazard	Cat. 1	(Aquatic Acute 1)	H400
4.1C	hazardous to the aquatic environment - chronic hazard	Cat. 1	(Aquatic Chronic 1)	H410

Remarks

For full text of H-phrases: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Spillage and fire water can cause pollution of watercourses.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

2.2 Label elements

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

Signal word **Danger**

Pictograms

GHS05, GHS07,
GHS08, GHS09



Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

P303+P361+P353 IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P391 Collect spillage.

Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant.

Hazardous ingredients for labelling:

m-phenylenebis(methylamine), 4-tert-butylphenol, 2-piperazin-1-ylethylamine, 2,4,6-tris(dimethylamino-methyl)phenol

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Classification acc. to 67/548/EEC
m-phenylenebis(methylamine)	CAS No 1477-55-0 EC No 216-032-5 REACH Reg. No 01-2119480150-50-xxxx	< 50	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1B / H317 Aquatic Chronic 3 / H412	harmful; Xn; R20/22 corrosive; C; R34 sensitising; Xi; R43 dangerous for the environment; R52-53

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Classification acc. to 67/548/EEC
4-tert-butylphenol	CAS No 98-54-4 EC No 202-679-0	< 25	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Repr. 2 / H361f Aquatic Chronic 1 / H410	irritant; Xi; R38-41 toxic for reproduction; Repr. Cat. 3; R62 dangerous for the environment; N; R51-53
Amines, C36-alkylenedi-	CAS No 68955-56-6 EC No 273-282-8	< 25	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	irritant; Xi; R38-41 dangerous for the environment; N; R50-53
2-piperazin-1-ylethylamine	CAS No 140-31-8 EC No 205-411-0 REACH Reg. No 01-2119471486-30-xxxx	< 25	Acute Tox. 4 / H302 Acute Tox. 3 / H311 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Chronic 3 / H412	harmful; Xn; R21/22 corrosive; C; R34 sensitising; Xi; R43 dangerous for the environment; R52-53
2,4,6-tris(dimethylamino-methyl)phenol	CAS No 90-72-2 EC No 202-013-9 REACH Reg. No 01-2119560597-27-xxxx	< 25	Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1B / H317 Aquatic Chronic 3 / H412	corrosive; C; R34 dangerous for the environment; R52-53
Bis (dimethylamino-methyl) phenol	CAS No 71074-89-0 EC No 275-162-0	< 25	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Skin Corr. 1 / H314 Eye Dam. 1 / H318 STOT SE 3 / H335	

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Seek medical treatment in case of complaints. Wash contaminated clothing before reuse.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the anti poison control centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate fire-fighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Warning and evacuating people in the neighbourhood.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

• Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feed-stuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Handling and storage

Keep only in the original container in a cool, well-ventilated place. Keep container closed when not in use.

Incompatible substances or mixtures

Do not store together with materials with which contact should be avoided (see chapter 10). Protect from sunlight. Keep away from sources of ignition - No smoking.

Consideration of other advice

Storage temperature of 0 °C and up to 50 °C.

• Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

Industrial uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

• relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
m-phenylenebis(methylamine)	1477-55-0	DNEL	0.2 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
m-phenylenebis(methylamine)	1477-55-0	DNEL	0.33 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
m-phenylenebis(methylamine)	1477-55-0	DNEL	1.2 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
4-tert-butylphenol	98-54-4	DNEL	0.071 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
4-tert-butylphenol	98-54-4	DNEL	0.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Amines, C36-alkylenedi-	68955-56-6	DNEL	17.6 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Name of sub-stance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Amines, C36-alkylenedi-	68955-56-6	DNEL	0.5 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
Amines, C36-alkylenedi-	68955-56-6	DNEL	3.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
2-piperazin-1-ylethylamine	140-31-8	DNEL	20 mg/kg	human, dermal	worker (industry)	acute - systemic effects
2-piperazin-1-ylethylamine	140-31-8	DNEL	21.4 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
2-piperazin-1-ylethylamine	140-31-8	DNEL	3.3 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
2-piperazin-1-ylethylamine	140-31-8	DNEL	3.6 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects

• **relevant PNECs of components of the mixture**

Name of sub-stance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.094 mg/l	aquatic organisms	freshwater	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.0094 mg/l	aquatic organisms	marine water	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.43 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.043 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.045 mg/kg	terrestrial organisms	soil	short-term (single instance)
m-phenylenebis(methylamine)	1477-55-0	PNEC	0.152 mg/l	aquatic organisms	water	intermittent release
4-tert-butylphenol	98-54-4	PNEC	0.01 mg/l	aquatic organisms	freshwater	short-term (single instance)
4-tert-butylphenol	98-54-4	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
4-tert-butylphenol	98-54-4	PNEC	1.5 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
4-tert-butylphenol	98-54-4	PNEC	0.27 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
4-tert-butylphenol	98-54-4	PNEC	0.027 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
4-tert-butylphenol	98-54-4	PNEC	46.67 mg/kg	aquatic organisms	water	short-term (single instance)

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environ- mental com- partment	Exposure time
4-tert-butylphenol	98-54-4	PNEC	0.25 mg/kg	terrestrial organisms	soil	short-term (single in- stance)
4-tert-butylphenol	98-54-4	PNEC	0.048 mg/l	aquatic organisms	water	intermittent release
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	0.234 µg/l	aquatic organisms	freshwater	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	0.0234 µg/l	aquatic organisms	marine water	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	100 mg/l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	2.04 mg/kg	aquatic organisms	freshwater sedi- ment	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	0.204 mg/kg	aquatic organisms	marine sedi- ment	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	3.33 mg/kg	aquatic organisms	water	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	1.084 mg/kg	terrestrial organisms	soil	short-term (single in- stance)
Amines, C36-alkyle- nedi-	68955- 56-6	PNEC	0.44 µg/l	aquatic organisms	water	intermittent release
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	0.058 mg/l	aquatic organisms	freshwater	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	0.0058 mg/l	aquatic organisms	marine water	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	250 mg/l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	215 mg/kg	aquatic organisms	freshwater sedi- ment	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	21.5 mg/kg	aquatic organisms	marine sedi- ment	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	42.9 mg/kg	terrestrial organisms	soil	short-term (single in- stance)
2-piperazin-1-ylethyl- amine	140-31-8	PNEC	0.58 mg/l	aquatic organisms	water	intermittent release
2,4,6-tris(dimethyl- aminomethyl)phenol	90-72-2	PNEC	0.084 mg/l	aquatic organisms	freshwater	short-term (single in- stance)
2,4,6-tris(dimethyl- aminomethyl)phenol	90-72-2	PNEC	0.0084 mg/l	aquatic organisms	marine water	short-term (single in- stance)
2,4,6-tris(dimethyl- aminomethyl)phenol	90-72-2	PNEC	0.2 mg/l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single in- stance)
2,4,6-tris(dimethyl- aminomethyl)phenol	90-72-2	PNEC	0.84 mg/l	aquatic organisms	water	intermittent release

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

8.2 Exposure controls

Appropriate engineering controls

Provide local exhaust or general room ventilation to minimize vapor concentrations.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection

• hand protection



Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• type of material

PVC: polyvinyl chloride, Nitrile rubber, Butyl rubber

• material thickness

> 0.5 mm.

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures



Protective clothing against liquid chemicals.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	white
Odour	characteristic

Other physical and chemical parameters

pH (value)	not determined
Melting point/freezing point	<0 °C
Initial boiling point and boiling range	>100 °C
Flash point	62 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid) non-flammable
Explosive limits	
• lower explosion limit (LEL)	1.1 vol%
• upper explosion limit (UEL)	9.4 vol%
Vapour pressure	5.15 Pa at 20 °C
Density	1.05 g/cm³ at 20 °C
Vapour density	>1 (air=1)
Solubility(ies)	not determined

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Water solubility	partially soluble
Partition coefficient	
n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	>300 °C
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

Of no significance.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Avoid extremely high (> 50 ° C) or low (<5 ° C) temperatures.

Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

10.5 Incompatible materials

acids - bases - oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

• **as a result of heating**

carbon monoxide (CO) - carbon dioxide (CO₂)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if swallowed.

• **Acute toxicity estimate (ATE)**

oral 998.9 mg/kg

• **Acute toxicity of components of the mixture**

Name of substance	CAS No	Exposure route	ATE
m-phenylenebis(methylamine)	1477-55-0	oral	500 mg/kg
m-phenylenebis(methylamine)	1477-55-0	inhalation: vapour	11 mg/l/4h
m-phenylenebis(methylamine)	1477-55-0	inhalation: dust/mist	2.4 mg/l/4h
2-piperazin-1-ylethylamine	140-31-8	oral	500 mg/kg

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Name of substance	CAS No	Exposure route	ATE
2-piperazin-1-ylethylamine	140-31-8	dermal	866 mg/kg
Bis (dimethylaminomethyl) phenol	71074-89-0	oral	500 mg/kg
Bis (dimethylaminomethyl) phenol	71074-89-0	dermal	1,100 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Summary of evaluation of the CMR properties

Suspected of damaging fertility.

Shall not be classified as germ cell mutagenic.

Shall not be classified as carcinogenic.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
m-phenylenebis(methylamine)	1477-55-0	LC50	87.6 mg/l	fish	96 h
m-phenylenebis(methylamine)	1477-55-0	EC50	15.2 mg/l	aquatic invertebrates	48 h
m-phenylenebis(methylamine)	1477-55-0	ErC50	32.1 mg/l	algae	48 h
4-tert-butylphenol	98-54-4	LC50	>1 mg/l	fish	96 h
4-tert-butylphenol	98-54-4	EC50	4.8 mg/l	aquatic invertebrates	48 h
4-tert-butylphenol	98-54-4	ErC50	14 mg/l	algae	72 h
Amines, C36-alkylenedi-	68955-56-6	ErC50	15.7 µg/l	algae	72 h
2-piperazin-1-ylethylamine	140-31-8	LC50	2,190 mg/l	fish	96 h
2-piperazin-1-ylethylamine	140-31-8	EC50	58 mg/l	aquatic invertebrates	48 h
2-piperazin-1-ylethylamine	140-31-8	ErC50	>1,000 mg/l	algae	72 h
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	ErC50	84 mg/l	algae	72 h

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
m-phenylenebis(methylamine)	1477-55-0	EC50	35.1 mg/l	aquatic invertebrates	24 h
m-phenylenebis(methylamine)	1477-55-0	LC50	6.77 mg/l	aquatic invertebrates	21 d
4-tert-butylphenol	98-54-4	EC50	8.1 mg/l	aquatic invertebrates	24 h
2-piperazin-1-ylethylamine	140-31-8	EC50	511 mg/l	microorganisms	2 h

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
m-phenylenebis(methylamine)	1477-55-0	carbon dioxide generation	49 %	28 d
4-tert-butylphenol	98-54-4	oxygen depletion	60 %	28 d
Amines, C36-alkylenedi-	68955-56-6	oxygen depletion	0 %	28 d
Amines, C36-alkylenedi-	68955-56-6	DOC removal	163 %	43 d
2-piperazin-1-ylethylamine	140-31-8	oxygen depletion	0 %	28 d
2-piperazin-1-ylethylamine	140-31-8	carbon dioxide generation	0 %	28 d
2-piperazin-1-ylethylamine	140-31-8	DOC removal	0 %	28 d
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	oxygen depletion	4 %	28 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
m-phenylenebis(methylamine)	1477-55-0		0.18 (25 °C)	
4-tert-butylphenol	98-54-4	2,043	3 (pH value: 5.7, 23 °C)	
2-piperazin-1-ylethylamine	140-31-8		-1.48 (20 °C)	

12.4 Mobility in soil

Data are not available.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

Endocrine disrupting potential

The mixture contains substance(s) with an endocrine disrupting potential.

Name of substance	CAS No	Combined category	Human health category	Wildlife category
4-tert-butylphenol	98-54-4	CAT2	CAT2	CAT2

Legend

CAT2 Category 2 - at least some in vitro evidence of biological activity related to endocrine disruption

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes

08 04 09x

waste adhesives and sealants containing organic solvents or other dangerous substances

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number 2735

14.2 UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S.

Hazardous ingredients

2-piperazin-1-ylethylamine, M-phenylenebis(methylamine)

14.3 Transport hazard class(es)

Class

8 (corrosive substances)

14.4 Packing group

III (substance presenting low danger)

14.5 Environmental hazards

hazardous to the aquatic environment:

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

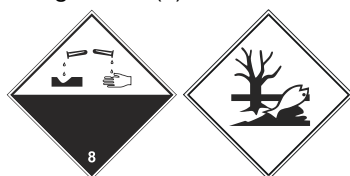
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

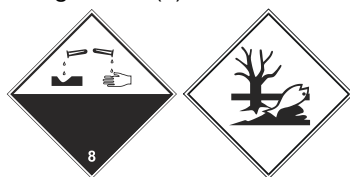
UN number	2735
Proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.
Class	8
Classification code	C7
Packing group	III
Danger label(s)	8 + "fish and tree"



Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	E
Hazard identification No	80
Emergency Action Code	2X

• International Maritime Dangerous Goods Code (IMDG)

UN number	2735
Proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.
Class	8
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	8 + "fish and tree"



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-B
Stowage category	A
Segregation group	18 - Alkalis

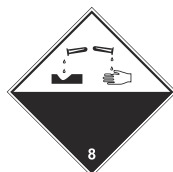
• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	2735
Proper shipping name	Amines, liquid, corrosive, n.o.s.
Class	8
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	8

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10



Special provisions (SP)
 Excepted quantities (EQ)
 Limited quantities (LQ)

A3, 274
 E1
 1 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

• Restrictions according to REACH, Annex XVII

None of the ingredients are listed.

• List of substances subject to authorisation (REACH, Annex XIV)

None of the ingredients are listed.

• Seveso Directive

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
E1	environmental hazards (hazardous to the aquatic environment, cat. 1)	100	200	56)

Notation

56) Hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

• Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.

• Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

• Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

None of the ingredients are listed.

• Explosives precursors which are subject to restrictions

none of the ingredients are listed.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	hazardous to the aquatic environment - acute hazard
Aquatic Chronic	hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
C	corrosive
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
N	dangerous for the environment
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	reproductive toxicity

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Abbr.	Descriptions of used abbreviations
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
Skin Sens.	skin sensitisation
STOT SE	specific target organ toxicity - single exposure
vPvB	very Persistent and very Bioaccumulative
Xi	irritant
Xn	harmful

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
 Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H302	harmful if swallowed
H311	toxic in contact with skin
H312	harmful in contact with skin
H314	causes severe skin burns and eye damage
H315	causes skin irritation
H317	may cause an allergic skin reaction
H318	causes serious eye damage
H332	harmful if inhaled
H335	may cause respiratory irritation
H361f	suspected of damaging fertility
H400	very toxic to aquatic life
H410	very toxic to aquatic life with long lasting effects
H412	harmful to aquatic life with long lasting effects
R20/22	harmful by inhalation and if swallowed
R21/22	harmful in contact with skin and if swallowed
R34	causes burns
R38	irritating to skin
R41	risk of serious damage to eyes
R43	may cause sensitisation by skin contact
R50/53	very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

DRY FLEX® COOL - Component B

Version number: GHS 1.0

Date of compilation: 2016-10-10

Code	Text
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

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.