



MARMOLINE DURA EP INJECTION - Winter (Comp. A)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name: MARMOLINE DURA EP INJECTION – Winter (Component A)
 Chemical Type: mixture

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

Two component solvent free epoxy injection resin. For use in concrete repairs and restoration of cracks

Advised uses

Relevant uses are listed above.

Not advised uses

No other uses are recommended unless an assessment has been conducted prior to the start of that use, which demonstrates that the risks associated with that use are controlled.

Details of the supplier of the safety data sheet

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture



GHS08 : Health hazard
 Muta 2 : H341 : Suspected of causing genetic defects



GHS09 : Environment
 Aquatic Chronic 2 H411 : Toxic to aquatic life with long lasting effects



GHS07
 Skin Irrit. 2 : H315 : Causes skin irritation
 Eye Irrit.2 : H319 : Causes serious eye irritation
 Skin Irrit. 1 : H317 : May cause an allergic skin reaction

2.2 Label elements

Hazard pictograms:



GHS07 GHS08 GHS09
 - Signal word : Warning

- Hazardous components which must be listed on labels: Reaction product of bisphenol-A (epichlorohydrin) & 2,3-epoxypropyl o-tolyl ether.



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Hazard statements:

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H317: May cause an allergic skin reaction.
- H341: Suspected of causing genetic defects.
- H411: Toxic to aquatic life with long lasting effects

Precautionary statements:

- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- 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 label).
- P405: Store locked up.
- P501: Dispose of contents/container according to local /international regulations

Additional statements:

It contains epoxy compounds. May cause an allergic reaction

2.3 Other hazards

Results of PBT and vPvB






PBT: Not applicable

vPvB: Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Chemical characterization: Mixtures

Description: Mixture of substances listed below with harmless additions

Dangerous substances		
CAS : 25068-38-6 NLP : 500-033-5 Index Nr: 603-074-00-8	Reaction product: bisphenol-A (epichlorhydrin) Epoxy resin (average molecular weight ≤700)  Aquatic Chronic 2, H411  Skin Irrit. 2, H315, Eye Irrit.2, H319, Skin Sens.1, H317	60-90%
CAS : 2210-79-9 EINECS : 218-645-3 Index Nr.: 603-056-00-X	2,3-epoxypropyl o-tolyl ether  Muta.2, H341,  Aquatic Chronic 2, H411  Skin Irrit. 2, H315, Skin Sens.1, H317	10-40%
Additional information For an explanation of the listed risk phrases, you should refer to Chapter 16		

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

In case of inhalation

- Provide for fresh air
- Artificial respiration only with a breathing mask or breathing apparatus
- Immediately call a doctor
- Supply fresh air and call for a doctor
- In case of unconsciousness, bring patient to stable sideways position.

In case of contact

- Immediately wash thoroughly with soap and water



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In case of contact with eyes:

- Open the eyelids and wash eyes under running water for a long time

In case of swallowing

- Provide carbon

- Provide big amount of water and fresh air. Call for a doctor immediately. Do not induce vomiting and seek medical help immediately. If necessary provide oxygen or artificial respiration only with breathing mask or breathing apparatus.

4.2 Most important symptoms and effects, both acute and delayed

No further information

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

Symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media: Suitable extinguishing media: All fire extinguishing measures should be compatible with the adjacent materials.

5.2 Special hazards arising from the substance or mixture: Carbon monoxide and carbon dioxide. The burning creates harmful and toxic gases.

5.3 Advice for firefighters: Special protective equipment: Wear breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Not necessary

6.2 Environmental procedures

Do not allow the mixture to disperse into waterways or sewers. If the product has escaped into a water course, into a drainage system or has contaminated the ground or the vegetation, notify the appropriate authorities.

6.3 Methods and material for containment and cleaning up

The collected material should be normally deposited.

Absorb it with field binders (sand, flint deposits, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents.

Product residues can be removed with solvent. The solvent should not be used unless the corresponding instructions and safety standards are applied.

6.4 Reference to other sections

Information on safe handling. (See Chapter 7)

Information on personal protection equipment. (See Chapter 8)

For disposal information. (See Chapter 13)

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

- Ensure good ventilation / exhaustion at the workplace.

- Avoid contact with skin and eyes.

- Avoid spray .

Instructions about protection against fire and explosion: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage

No special requirements

Hints for co-storage: Keep separate from food



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Further information about storage conditions:
 - Store tightly closed, in a cool and dry place
 - Keep at temperatures between 2 °C and 40 °C.

7.3 Specific end use(s) : No further information

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- Substances whose occupational exposure limits have to be monitored in the work environment:
 There are no environmental limits that should be checked, for the substances contained in the product

DNEL		
25068-38-6 Reaction product: bisphenol-A (epichlorhydrin)		
Skin	DNEL acute / short term exposure – systemic effect	8,33 mg/kg bw/d (worker)
	DNEL acute / long term exposure – systemic effect	8,33 mg/kg bw/d (worker)
Respirable fraction	DNEL acute / short term exposure – systemic effect	12,25 mg/m ³ bw/d (worker)
	DNEL acute / long term exposure – systemic effect	12,25 mg/m ³ bw/d (worker)
PNECs		
25068-38-6 Reaction product: bisphenol-A (epichlorhydrin)		
PNEC STP	10 mg/l (.)	
PNEC aqua (freshwater)	0,006 mg/l (.)	
PNEC aqua (marine water)	0,0006 mg/l (.)	
PNEC sediment (freshwater)	0,0627 mg/l (.)	
PNEC sediment (marine water)	0,00627 mg/l (.)	
PNEC soil	0,0478 mg/l (.)	

Additional information. The current lists of the preparation were used as a basis

8.2 Exposure controls

- Individual protection measures
- General security and hygiene measures
- Keep away from foodstuffs, beverages and animal food
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and after work
- Avoid contact with eyes and skin
- Respiratory protection:
 Filter AX
 Filter P2
 For small pollution, use respiratory filter device of intensive or prolonged exposure.
 Protective breathing apparatus independent of circulating air.
- Protective gloves. The glove material must be impermeable and resistant to the product / the substance / the preparation. Due to missing tests we cannot recommend any glove material for the product / the preparation / the chemical mixture.
 Select the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Gloves material: Gloves made of synthetic rubber. The selection of suitable gloves depends not only on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is actually a preparation of several substances, the resistance of the glove material can not be ascertained, and should be checked before use.
- Eye protection: Tightly sealed goggles



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:
Form: Liquid
Colour: Transparent
Odour: Characteristic
Odor threshold: Not specified
Change in condition
Melting point / Melting range: Not determined
Boiling point / Boiling range: Not determined
Flash point: > 110 ° C (DIN 51755)
Flammability (solid, gaseous): Unused
Ignition temperature
Decomposition temperature: 200°C
Risk of self-ignition: Product is not self-ignite
Risk of explosion: No explosion hazard
Explosion limits
Lower: Not applicable
Upper: Not applicable
Properties spread of fire: Not classified as oxidising
Vapor Pressure: Not specified
Density at 20°C: ~ 1,1 gr / cm³
Relative density: Not specified
Vapour density: Not specified
Evaporation rate: Not specified
Solubility in / Miscibility with water: Not miscible or difficult to mix
Partition coefficient (n-Octanol / H₂O): Not specified
Kinematic: Not specified
Organic solvents: 0.0%

9.2 Other information:

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity : see 10.3

10.2 Chemical stability:

- Thermal decomposition / conditions to be avoided.

Note: Take precautions to avoid static discharges.

10.3 Possibility of hazardous reactions: It reacts with acids, alkalis, and oxidizing agents.

10.4 Conditions to avoid : No further relevant information available.

10.5 Incompatible materials

- Ammoniumnitrat
- Strong oxidizing agents.

10.6 Hazardous decomposition products

- Carbon monoxide and carbon dioxide
- The burning creates harmful and toxic gases

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

- Acute toxicity hazard.



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Significant ranking values LD / LC 50		
25068-38-6 Reaction product: bisphenol- A (epichlorhydrin)		
Oral	LD 50	15000 mg/kg (rat)
Dermal	LD 50	23000 mg/kg (rat)

Primary irritant effect

- On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect.

Additional toxicological information

The product shows the following dangers according to the calculation method of the Regulation (EC) No. 1272/2008 (CLP / GHS)

Skin Irrit.2

Eye Irrit. 2

Skin Sens. 1

- Sensitization: May cause sensitization by skin contact
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction: Muta 2

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Aquatic toxicity	
25068-38-6 Reaction product: bisphenol-A (epichlorhydrin)	
EC50/24 h	1,8 mg/l (daphnia magna)
ErC50/72 h	>11 mg/l (algae)
LC50/96 h	2,0 mg/l (onchorhyncus mykiss)
NOEC (21 d)	0,3 mg/l (daphnia magna)

12.2 Persistence and degradability: No further information available.

12.3 Bioaccumulative potential: No further information available.

12.4 Mobility in soil:

No further information available.

Ecotoxic effects

Remark: Toxic for fish

Additional ecological information:

General notes: Do not allow product to reach ground water, water course or sewage system. Dangerous for drinking water, and when small quantities leak into the ground. In the aquatic environment it is poisonous for fish and aquatic organisms.

Hazardous to the aquatic environment - class 2 (Our assessment): hazardous

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects: No further information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

Give it to hazardous wastes disposal agency .

Must not be disposed together with household garbage. Do not empty into drains

ANNEX



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08 04 10	Waste adhesives and sealants as mentioned in 08 04 09
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Contaminated packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/IMDG/IATA : UN 3082

14.2 UN proper shipping name

ADR :

UN 3082, environmentally hazardous substance, liquid, N.O.S. (Reaction product, bisphenol-A (epichlorhydrin), Epoxy resin (average molecular weight ≤700), 2,3-epoxypropyl o-tolyl ether

IMDG :

Environmentally hazardous substance, liquid, N.O.S. (Reaction product : Bisphenol-A-(Epichlorhydrine) Epoxy resin (average molecular weight ≤700), 2,3 Epoxypropyl-o toly lether), MARINE POLLUTANT

IATA :

Environmentally hazardous substance, liquid, N.O.S. (Reaction product : Bisphenol-A-(Epichlorhydrine) Epoxy resin (average molecular weight ≤700), 2,3 Epoxypropyl-o toly lether)

14.3 Transport hazard class(es):

ADR:



Class: 9 (M6) Miscellaneous dangerous goods

Label : 9

IMDG, IATA:



Class: 9 (M6) Miscellaneous dangerous goods

Label : 9

14.4 Packing group:

ADR/IMDG/IATA : III

14.5 Dangers for the environment

- Marine pollutant : Symbol (fish and tree)
- Special marking (ADR): Symbol (fish and tree)
- Special marking (IATA): Symbol (fish and tree)

14.6 Special precautions for the user

Warning: Miscellaneous dangerous substances and articles.

- Kemler Number: 90
- EMS Number: F-A, S-F

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

- Transport / Additional information
- ADR
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 5L
- Transport group: 3
- Tunnel restriction code E

UN "Model Regulation" UN 3082, environmentally hazardous substance, liquid, N.O.S (Reaction product, bisphenol-A (epichlorhydrin), Epoxy resin (average molecular weight ≤700), 2,3-epoxypropyl o-tolyl ether), 9, III



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SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 1907/2006 of 18/12/2006
Regulation (EC) No 987/2008 of 09/10/2008
Corrigendum to European Regulation (EC) No. 987/2008 of 08/10/2008
Directive 2003/53 / EC of the EP and of the Council of 18/6/2003
Regulation (EC) No. 552/2009 of 22/06/2009
Regulation (EC) No. 1272/2008 of 16/12/2008
Regulation (EU) No. 453/2010 of 20/05/2010
Legislative Decree No. 81/2008
Requirements of regulation (EC) No. 1907/2006 "REACH"

General information

When the mixture is mixed with water, contains less than 0.0002% soluble chromium VI, of the total dry weight, according to Directive 2001/60 / EC.

Health monitoring: Frequent visits

The list of laws is illustrative . The user of the product should consider the current regulations and recommendations for proper use of the product.

SECTION 16: OTHER INFORMATION

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The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -