



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

**Product identifier**

Product name: MARMOLINE DURA EP INJECTION – Summer ( 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.



**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

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

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 <sup>3</sup> bw/d (worker)
	DNEL acute / long term exposure – systemic effect	12,25 mg/m <sup>3</sup> 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

**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 / cm<sup>3</sup>  
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 / H<sub>2</sub>O): 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.



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.

Ecotoxicological 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	
08 04 10	Waste adhesives and sealants as mentioned in 08 04 09



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



## 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 -