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TERAFLEX® DRY
ANTIFREEZE ADDITIVE
10.07.2014
11.07.2014

TERAFLEX® DRY ANTIFREEZE ADDITIVE

dry construction antifreeze additive of concrete
and dry construction cement-based mixtures,
which allows working at low temperatures up to -4°C

1. Product / Production and Corporate Title

1.1. Product name

TERAFLEX® DRY ANTIFREEZE ADDITIVE

1.2. Scope of use:

TERAFLEX® DRY ANTIFREEZE ADDITIVE is designed for use when working at mild winter conditions (expected temperature reductions, mild freezing during the day, expected cold periods) at temperatures not lower than -4°C and not higher than + 10°C. It may be added to all dry construction cement-based mixes. It is recommended when plastering or bonding thermo-insulating materials and applying different types of ceramic and stone linings.

1.3. Company:

Marisan and Kolev Ltd
East Industrial Zone
15, Kalna Dere Str.
7009, Ruse, Bulgaria

Contact address:

Marisan and Kolev Ltd.
East Industrial Zone
15, Kalna Dere Str.
7009, Ruse, Bulgaria

Tel.: +359-82-519721

Fax: +359-82-845351

e-mail: office@marisanbg.com

1.4. In case of emergency:

Tel.: 112

Toxicology Clinic to Multi-profile Hospital for Active Treatment SA „N. I. Pirogov”

Tel.: + 359 2 9154 411

+ 359 2 9154 233

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2. Possible hazards

2.1. Classification of the substance or the mixture – mixture:

2.2.1. Classification in accordance with Directive 67/548 EU

Xi Irritant

Classification in accordance with Regulation (EU) 1272/2008

H 315 Causes skin irritation
H 319 Causes serious eye irritation
H 335 May cause respiratory irritation

Classification system:

The classification is in accordance with the current lists of EU. Classification system is contains information from specialized literature.

2.2. Label elements

2.2.1. Labeling in accordance with Regulation (EU)1272/2008 (CLP)

Pictograms:



Hazard phrases:

H 315 Causes skin irritation
H 319 Causes serious eye irritation
H 335 May cause respiratory irritation

Safety recommendations

P 233 Keep container tightly closed.
P 262 Do not get in eyes, on skin, or on clothing

2.2. Labeling in accordance with Directive 1999/45 (DPD)

Hazard symbols



Xi – Irritant

Risk phrases

R36/37/38 Irritating to eyes, respiratory system and skin

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Safety Recommendations
 S08 Keep container dry
 S24/25 Avoid contact with skin and eyes
2.3. Other hazard phrases

Results from PBT or vPvB hazards:

- PBT – not tested
- vPvB – not tested

3. Composition / Information on Ingredients**3.1. Substances** - not applicable**3.2. Mixture****3.2.1. Common characteristic****Description:**

Homogenous cement-based powder, modified with high quality polymers and cellulose additives.

Substances which determine the harmfulness:

Substance	Index №	EINECS №	CAS №	Directive 67/548		Regulation (EO) 1272/2008
				Hazard symbols	R -phrases	
Aluminate Cement	-	266-045-5	65997-16-2	Xi	R36/37/38	H 315; H 319; H335

Does not contain dangerous chemical substances. Quantity of soluble chrome (IV) within the ready-made mass of the product is $\leq 0,0002\%$.

The full text of the statements can be found in Chapter 16.

4. First Aid Measures**General information**

When inhaled:

The nose and the throat should be rinsed with plenty of water. Search medical advise if needed.

In case of skin contact:

Rinse with plenty of water. Search medical help in case of long term irritation



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In case of eye contact:

Rinse with plenty of water with open eyelids for at least 15 minutes and seek medical help.

When swallowed:

Seek medical help immediately. Provide the label of the packaging.

Note to the Medics:

5. Fire-Fighting Measures

5.1. Extinguishing agents

The product is not inflammable. However, the packaging is inflammable.

Suitable extinguishing agents:

Foam, carbon dioxide, water spray.

Unsuitable extinguishing means because of security considerations:

5.2. Special hazards arising from substance or mixture

5.3. Advice for firefighters

Carry individual respiratory apparatus with pressured air and protective firefighting clothing (firefighting helmet, jacket, trousers, shoes and gloves).

5.4. Supplementary information:

Residues of fire and water contaminated water from fire extinguishing should be removed in compliance with the local provisions.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures:

Take into consideration the precautions indicated in items 7 and 8.

6.2. Precautions for environmental protection:

Do not let the release of dust.

Do not release into the canalization, into subterranean water. In case that the product has been released, inform the adequate office.

6.3. Methods and materials for limitation and cleaning up:

Mechanically, the product can be cleaned up by a dry method.



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7. Work and Storage

7.1. Precautions for safe handling

Do not let the release of dust.

7.2. Conditions for safe storage, including any incompatibilities:

Requirements to the storage premises and depositories:

Store in dry premises. Keep away from moisture.

Instructions for storage along with other materials

Do not store together with food or drinks.

Other data about the storage conditions:

7.3. Specific and end-use

The product has no other uses than those specified on the label and product data sheet.

8. Exposure Controls and Personal Protective equipment

8.1 Parameters and control

Comply with the limit values of dust according to Classification of German MAK Commission from 1992

Concentration of fine dust – maximum 6 mg/m³,
Total concentration of dust – maximum 15 mg/m³

8.2. Exposure control

In most of the cases proper ventilation is sufficient. In some production operation Local exhaust ventilation might be necessary in order not to surpass the limit values of concentration of dust.

Technical control means:

Technical control means are not required.

8.3. Individual protection measures, such as personal protective equipment:

General protective and hygienic measures:

Comply with the usual precautions for work with chemical substances.

Before the start of work, take proper skin protection.

Do not eat, drink or smoke during working time.

After completion of work and prior to resting, wash hands with water and soap.

Respiratory protection:

In case of insufficient ventilation or working indoors, usage of a mask or a respiratory apparatus is recommendable.

Short-term exposure - use FFP1S air respirator in accordance to EN 149.

Long-term exposure – use respiratory apparatus.

Skin protection:

recommendable; use protective gloves from a material that is resistant to the product. It is recommendable to use softening hand cream.

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Eye protection: recommendable; in accordance with EN 166 the use of tight-fitting chemical resistant safety goggles type 2A5 is recommended.

Body protection: Use suitable clothing.

9. Physical and Chemical Properties

9.1. Information about the physical and Chemical Properties

Appearance	dust
Color:	grey
Odor:	none
Freezing interval / point:	Not applicable
Interval / Temperature of melting:	Not applicable
Interval / Temperature of boiling:	Not applicable
Flashing point:	Not applicable
Auto ignition point	Not applicable
Temperature of inflammability and explosion:	
Lower limit	Not applicable
Upper limit	Not applicable
Density, 20°C:	Not applicable
pH:	11 – 12,5
Solubility:	The product is soluble in water in its current state.

10. Stability and Reactivity

10.1. Reactivity

The product has alkaline reaction with water.

10.2. Chemical stability:

The product is stable under normal conditions of work and storage.

10.3. Possibility of hazardous reactions

If used properly, hazardous reactions are unknown.

10.4. Conditions to avoid:

Avoid accidental contact with water.

10.5. Incompatible materials

10.6 Hazardous products of decomposition

If used properly, hazardous products of decomposition are unknown.



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11. Toxicological Information

11.1. Information on toxicological effects

It may cause irritation if swallowed, inhaled or in direct contact with eyes.

11.2. Information on possible ways of exposure

When swallowed:

Unlikely route of exposure when the product is used properly.

After contact with the skin:

Skin absorption is unexpected.

Non-continuous single contact with the skin is unlikely to cause irritation. More continuous and intense contact with the skin may cause irritation.

After inhalation:

Single inhalation is not expected to be hazardous.

After contact with the eyes:

It may cause slight temporary irritation of the eyes. Damage to the cornea is not expected.

Other data:

There is no data about any mutagenic influence.

There is no data about any carcinogenic effect.

There is no data about any fertility harm effect.

11.3. Supplementary information:

Negative effects are not expected when working in accordance with the above mentioned recommendations.

12. Ecological Information

12.1. Toxicity

In solid state the product is not hazardous to the environment. Owing to the elevated level of pH, uncontrolled release in the subterranean waters is not allowed.

12.2. Resistance and degradability

The product is resistant and degradability is not expected.

12.3. Bio-accumulating ability

The product does not have bio-accumulating ability.



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12.4. Mobility

Soil: Not expected. In solid state the product is not hazardous to the environment.

Water: Class of water pollution 1: weak pollutant.

Do not allow not dissolved material or big quantities of it to go in the solid, in water or canalization.
Owing to the elevated level of pH, uncontrolled release in the subterranean waters is not allowed.

Air: Not expected. In solid state the product is not hazardous to the environment.

12.5. Other adverse effects

13. Disposal Considerations

13.1. Methods for treatment of the waste

The procedures for elimination and destruction should correspond to all the local and national laws and provisions.

Dissolved with water or in a solid state should be treated as a construction waste and it should be disposed in accordance with the local norms and regulations.

The product should not be disposed together with domestic wastes.

No material or spills or water from the cleaning of the product should be allowed in sewerage or open water reservoirs.

13.2. Packaging wastes:

The completely emptied and cleaned packages can be used again or handed over for recycling.

A contact should be established with the manufacturer about recycling.

Removal of containers to be carried out in accordance with respective authorities.

14. Transport Information

14.1. Land transportation ADR / RID:

The product is not classified in this mode of transportation.

14.2. Sea transport IMDG / GGVSee:

The product is not classified in this mode of transportation.

14.3. Air transport ICAO / IATA:

The product is not classified in this mode of transportation.

15. Regulatory Information

15.1. Specific for the substance or mixture / legislation on safety, health and environment:

- The product does not contain information about the ozone layer according Reglament/EO/2073/2007
- The product does not contain substances, persistent organic pollutants under Reglament/EO/850/2004
- According EO/67/548 the product does not require labeling for dangerous products.



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15.2. Assess the safety of the substance or mixture:

There are no estimates available.

16. Other Information

16.1 Statements indicated in Chapter 3

H – phrases:

H 315 Causes skin irritation
H 319 Causes serious eye irritation
H 335 May cause respiratory irritation

R – phrases:

R36/37/38 Irritating to eyes, respiratory system and skin

16.2 Sources of information

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18.12.2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the relevant international rules for transport
- Regulation (EC) No. 1272/2008 on classification, packaging and labeling of dangerous substances and mixtures
- Regulation (EC) 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18.12.2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) .7
- Regulation (EC) 67/548 relating to the classification, packaging and labeling of dangerous substances and mixtures
- Law on protection from the harmful effects of chemicals / SG 95 of 24.11.2006
- Ordinance on the manner of classification, packaging and labeling of chemical substances and mixtures
- Ordinance № 13 on the protection of workers from risks related to exposure to chemical agents at work
- Ordinance № 14 on the norms of permissible concentrations of harmful substances in the atmospheric air of the settlements
- European Agreement concerning the international carriage of dangerous goods ADR
- Regulations concerning the International Carriage of Dangerous Goods RID

The data in this Safety Data Sheet are based on the current state of our knowledge and satisfy the national legislation and the legislation of the EU. The specific conditions of work of the relevant user, however, are beyond our knowledge and control. The user shall be obligated under his own responsibility to conform to the relevant existing legal norms and provisions. The data in this Safety Data Sheet describe the requirements for security and do not constitute any guarantee for the properties of the product.

