

SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|-------------|-----------------------|
| | | |
| | | |

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

| 1.1 Product | identifier |
|-------------|------------|
|-------------|------------|

Trade name

SikaTop[®] Armatec[®]-110 EpoCem[®] (C)

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

| Product use | : Cement / Mortar |
|-------------|-------------------|

1.3 Details of the supplier of the safety data sheet

| Company name of supplier | : | Sika South Africa (Pty) Ltd 9 Hocking Place Westmead 3608 Pinetown South Africa |
|-----------------------------------------------------|---|---------------------------------------------------------------------------------------------|
| Telephone | : | +27 (0)31 792 6500 |
| Telefax | : | +27 (0)31 700 1760 |
| E-mail address of person responsible for the SDS | : | headoffice@za.sika.com |

1.4 Emergency telephone number

+27 82 490 9409

SECTION 2: Hazards identification

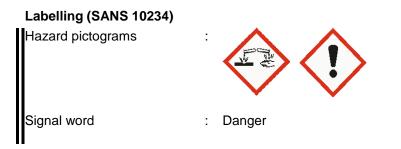
Type of product

2.1 Classification of the substance or mixture

| Classification (SANS 10234) | |
|---------------------------------------------------------------------------------------|-----------------------------------------|
| Skin irritation, Category 2 | H315: Causes skin irritation. |
| Serious eye damage, Category 1 | H318: Causes serious eye damage. |
| Specific target organ toxicity - single ex- posure, Category 3, Respiratory system | H335: May cause respiratory irritation. |

: Mixture

2.2 Label elements





| Revision Date 22.03.2019 | Vers | sion 2.0 | Print Date 22.03.2019 |
|--------------------------|---------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Hazard statements | : H315 H318 H335 | Causes skin irritati Causes serious ey May cause respira | e damage. |
| Precautionary statements | : Prevention: P261 | Avoid breathing du pours/ spray. | st/ fume/ gas/ mist/ va- |
| | P264 P280 | Wash skin thoroug | hly after handling. oves/ eye protection/ face |
| | Response: P304 + P340 | + P312 IF INHALED: air and keep comfo | Remove person to fresh ortable for breathing. Call R/doctor if you feel un- |
| | P305 + P351 | + P338 + P310 IF IN with water for seve | ral minutes. Remove resent and easy to do. mmediately call a |
| | Storage: P403 + P233 | | tilated place. Keep con- |

Hazardous components which must be listed on the label: Cement (chromium reduced)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

| Chemical name | CAS-No. | Classification | Concentration |
|---------------------------|---------------------|--------------------|---------------|
| | EC-No. | (SANS 10234) | (% w/w) |
| | Registration number | | |
| Cement (chromium reduced) | 65997-15-1 | Skin Irrit.2; H315 | >= 25 - < 40 |
| | 266-043-4 | Eye Dam.1; H318 | |
| | | STOT SE3; H335 | |
| sodium nitrite | 7632-00-0 | Ox. Sol.2; H272 | >= 0,25 - < 1 |
| | 231-555-9 | Acute Tox.3; H301 | |
| | 01-2119471836-27- | Eye Irrit.2; H319 | |
| | XXXX | Aquatic Acute1; | |
| | | H400 | |

Substances with a workplace exposure limit :



| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|------------------------------------------------------|-----------------------|
| Quartz (SiO2) | 14808-60-7 238-878-4 | >= 40 - < 60 |
| Fumes, silica | 69012-64-2 273-761-1 01-2119486866-17- XXXX | >= 5 - < 10 |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures General advice : Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled : Move to fresh air. Consult a physician after significant exposure. In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing. If swallowed : Do not induce vomiting without medical advice. Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. 4.2 Most important symptoms and effects, both acute and delayed Symptoms : Couah Respiratory disorder **Excessive lachrymation** Erythema Dermatitis See Section 11 for more detailed information on health effects and symptoms. Risks : irritant effects Causes skin irritation.



SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| | Causes serious eye damage. May cause respiratory irritatio | |
| 4.3 Indication of any immediate r Treatment | nedical attention and special tre : Treat symptomatically. | eatment needed |
| SECTION 5: Firefighting meas | sures | |
| 5.1 Extinguishing media | | |
| Suitable extinguishing media | : In case of fire, use water/wate ide/sand/foam/alcohol resista extinction. | er spray/water jet/carbon diox- nt foam/chemical powder for |
| 5.2 Special hazards arising from | the substance or mixture | |
| Hazardous combustion prod- ucts | : No hazardous combustion pro | oducts are known |
| 5.3 Advice for firefighters | | |
| Special protective equipment for firefighters | : In the event of fire, wear self- | contained breathing apparatus. |
| Further information | : Standard procedure for chem | ical fires. |
| | | |
| SECTION 6: Accidental releas | e measures | |
| SECTION 6: Accidental releas 6.1 Personal precautions, protec | | procedures |
| | tive equipment and emergency : Use personal protective equip | • |
| 6.1 Personal precautions, protec | tive equipment and emergency | oment. |
| 6.1 Personal precautions, protec Personal precautions | tive equipment and emergency : Use personal protective equip Avoid breathing dust. | oment. |
| 6.1 Personal precautions, protec Personal precautions | tive equipment and emergency : Use personal protective equip Avoid breathing dust. | boment. Dersons. |
| 6.1 Personal precautions, protections Personal precautions 6.2 Environmental precautions Environmental precautions | tive equipment and emergency Use personal protective equip Avoid breathing dust. Deny access to unprotected p Try to prevent the material fro courses. | boment. Dersons. |
| 6.1 Personal precautions, protections Personal precautions 6.2 Environmental precautions Environmental precautions | tive equipment and emergency Use personal protective equip Avoid breathing dust. Deny access to unprotected p Try to prevent the material fro courses. | oment. bersons. om entering drains or water without creating dust. |
| 6.1 Personal precautions, protections Personal precautions 6.2 Environmental precautions Environmental precautions 6.3 Methods and material for con | tive equipment and emergency Use personal protective equip Avoid breathing dust. Deny access to unprotected p Try to prevent the material fro courses. tainment and cleaning up Pick up and arrange disposal | oment. bersons. om entering drains or water without creating dust. |



SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|-------------|-----------------------|
| | | |

SECTION 7: Handling and storage

| 7.1 Precautions for safe handling | J | |
|-------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advice on safe handling | | Do not breathe vapours/dust. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area. Follow standard hygiene measures when handling chemical products |
| Advice on protection against fire and explosion | : | Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. |
| 7.2 Conditions for safe storage, in | nclu | uding any incompatibilities |
| Requirements for storage areas and containers | : | Store in original container. Keep in a well-ventilated place. Observe label precautions. Store in accordance with local regulations. |
| Other data | : | Keep in a dry place. No decomposition if stored and applied as directed. |
| 7.3 Specific end use(s) Specific use(s) | : | Consult most current local Product Data Sheet prior to any use. |

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---------------------|-------------------|----------------------------------|--------------------|------------|
| Quartz (SiO2) | 14808-60-7 | TWA OEL-CL (Respirable dust) | 0,1 mg/m3 | ZA OEL |
| Further information | Control Limit | | | |
| | | TWA OEL-RL (Respirable dust) | 0,1 mg/m3 | ZA OEL |
| Further information | Recommended Limit | | | |
| | | TWA (Respirable | 0,1 mg/m3 | 2004/37/EC |



| evision Date 22.03.201 | 9 | Version 2.0 | | Print Date 22.03.2019 |
|------------------------|-------------|-------------------|----------|-----------------------|
| | | | | |
| | | dust) | | |
| Further information | Carcinogens | or mutagens | | |
| Cement (chromium | 65997-15-1 | TWA OEL-RL | 5 mg/m3 | ZA OEL |
| reduced) | | (Respirable dust) | | |
| Further information | Recommende | ed Limit | | |
| | | TWA OEL-RL | 10 mg/m3 | ZA OEL |
| | | (inhalable dust) | | |
| Further information | Recommende | ed Limit | | |
| Fumes, silica | 69012-64-2 | TWA OEL-RL | 3 mg/m3 | ZA OEL |
| | | (Respirable dust) | | |
| Further information | Recommende | ed Limit | | |
| | | TWA OEL-RL | 6 mg/m3 | ZA OEL |
| | | (inhalable dust) | _ | |
| Further information | Recommende | ed Limit | | |

8.2 Exposure controls

| Personal protective equipment | t |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye protection | Safety glasses with side-shields conforming to EN166 Eye wash bottle with pure water |
| Hand protection | Chemical-resistant, impervious gloves complying with an ap- proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu- facturer specifications. |
| | Recommended: Butyl rubber/nitrile rubber gloves. Contaminated gloves should be removed. |
| Skin and body protection | Dust impervious protective suit Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionaly recommended for mixing and stirring work. |
| Respiratory protection | Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe work- ing limits of the selected respirator. particulate filter P P1: Inert material; P2, P3: hazardous substances Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Meth- ods for determining inhalation exposure). This applies in par- ticular to the mixing / stirring area. In case this is not sufficent to keep the concentrations under the occupational exposure limits then respiration protection measures must be used. |



SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 Ver | sion 2.0 Print Date 22.03.2019 |
|------------------------------|--------------------------------|
|------------------------------|--------------------------------|

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Appearance | i ar | powder |
|--------------------------------------------|------|------------------------|
| Colour | : | grey |
| Odour | : | odourless |
| Odour Threshold | : | No data available |
| Flash point | : | Not applicable |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Lower explosion limit (Vol-%) | : | No data available |
| Upper explosion limit (Vol-%) | : | No data available |
| Flammability | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |
| рН | : | > 11 at 500,00 g/l |
| Melting point/range / Freez- | : | No data available |
| ing point Boiling point/boiling range | : | No data available |
| Vapour pressure | : | Not applicable |
| Density | : | No data available |
| Bulk density | : | ca.1.200 kg/m3 |
| Water solubility | : | insoluble |
| Partition coefficient: n- octanol/water | : | No data available |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Relative vapour density | : | No data available |
| Evaporation rate | : | No data available |
| untry 74 0000000000040 | | |

Country ZA 00000022942



SikaTop[®] Armatec[®]-110 EpoCem[®] (C)

| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|-------------|-----------------------|
| | | |

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.



SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|-------------|-----------------------|
| | | |

Reproductive toxicity Not classified based on available information.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

| Additional ecological infor- | : | There is no data available for this product. |
|------------------------------|---|----------------------------------------------|
| mation | | |

SECTION 13: Disposal considerations

| 13.1 Waste treatment methods | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe |
| | way. Dispose of surplus and non-recyclable products via a licensed |



| Revision Date 22.03.2019 | Version 2.0 | Print Date 22.03.2019 |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| | waste disposal contractor. Disposal of this product, solution at all times comply with the requ protection and waste disposal le local authority requirements. Avoid dispersal of spilled materi soil, waterways, drains and sew | uirements of environmental egislation and any regional ial and runoff and contact with |
| European Waste Catalogue | : 17 01 01 concrete | |
| Contaminated packaging | : 15 01 10* packaging containing by dangerous substances | residues of or contaminated |

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

No data available

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

SECTION 15: Regulatory information

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

| International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors | : Not applicable |
|------------------------------------------------------------------------------------------------|-------------------------------------------------|
| REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). | : None of the components are listed (=> 0.1 %). |
| REACH - List of substances subject to authorisation (Annex XIV) | : Not applicable |



SikaTop® Armatec®-110 EpoCem® (C)

| Revision Date 22.03.2019 | Version 2.0 | | Print Date 22.03.2019 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Regulation (EC) No 1005/2009 on plete the ozone layer | substances that de- | : No | ot applicable |
| Regulation (EC) No 850/2004 on p lutants | ersistent organic pol- | : No | ot applicable |
| Regulation (EC) No 649/2012 of th ment and the Council concerning th of dangerous chemicals | • | : No | ot applicable |
| REACH - Restrictions on the manu the market and use of certain dang preparations and articles (Annex X | erous substances, | lo | onditions of restriction for the fol- wing entries should be considered: ement (chromium reduced) (47) |
| Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control or major-accident hazards involving dangerous substances. Not applicable | | d of the Council on the control of | |

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

| Full | text | of | H-Statements | |
|------|------|----|---------------------|--|
|------|------|----|---------------------|--|

| I un text of H-Statements | | | |
|----------------------------------|---|--------------------------------------------------------------|--|
| H272 | : | May intensify fire; oxidizer. | |
| H301 | : | Toxic if swallowed. | |
| H315 | : | Causes skin irritation. | |
| H318 | : | Causes serious eye damage. | |
| H319 | : | Causes serious eye irritation. | |
| H335 | : | May cause respiratory irritation. | |
| H400 | : | Very toxic to aquatic life. | |
| Full text of other abbreviations | | | |
| Acute Tox. | : | Acute toxicity | |
| Aquatic Acute | : | Short-term (acute) aquatic hazard | |
| Eye Dam. | : | Serious eye damage | |
| Eye Irrit. | : | Eye irritation | |
| Ox. Sol. | : | Oxidizing solids | |
| Skin Irrit. | : | Skin irritation | |
| STOT SE | : | Specific target organ toxicity - single exposure | |
| ADR | : | European Agreement concerning the International Carriage of | |
| | | Dangerous Goods by Road | |
| CAS | : | Chemical Abstracts Service | |
| DNEL | : | Derived no-effect level | |
| EC50 | : | Half maximal effective concentration | |
| GHS | : | Half maximal effective concentration | |
| ΙΑΤΑ | : | : International Air Transport Association | |
| IMDG | : | International Maritime Code for Dangerous Goods | |
| LD50 | : | Median lethal dosis (the amount of a material, given all at | |
| | | once, which causes the death of 50% (one half) of a group of | |
| | | | |



| Revision Date 22.03.2019 | Versie | on 2.0 | Print Date 22.03.2019 | | |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|--|
| LC50 | test animals) : Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period) | | | | |
| MARPOL | : International C | International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 | | | |
| OEL PBT PNEC REACH SVHC vPvB | Occupational Persistent, bid Predicted no e Regulation (E and of the Co istration, Eval cals (REACH) Substances o | Occupational Exposure Limit Persistent, bioaccumulative and toxic Predicted no effect concentration Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Reg- istration, Evaluation, Authorisation and Restriction of Chemi- cals (REACH), establishing a European Chemicals Agency Substances of Very High Concern Very persistent and very bioaccumulative | | | |
| Classification of the mixtu | ıre: | Classificat | ion procedure: | | |
| Skin Irrit. 2 | H315 | Calculation | method | | |
| Eye Dam. 1 | H318 | Calculation | method | | |
| STOT SE 3 | H335 | Calculation | method | | |

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

ZA / EN