according to Regulation (EC) No. 1907/2006

# Sikagard®-230 MIC

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Version 1.0



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

1.1 Product identifier

Trade name

Sikagard®-230 MIC

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

Product use

: For professional users only.

1.3 Details of the supplier of the safety data sheet

Company name of supplier

Sika Limited

Watchmead Welwyn Garden City

Hertfordshire. AL7 1BQ

Telephone

+44 (0)1707 394444

Telefax

+44 (0)1707 329129 : EHS@uk.sika.com

E-mail address of person

responsible for the SDS

1.4 Emergency telephone number

+44 (0)1707 363899 (available during office hours).

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### Additional Labelling

EUH210

Safety data sheet available on request.

#### 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

#### Components

according to Regulation (EC) No. 1907/2006

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Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Lithium sulphate, monohydrate	10102-25-7 Not Assigned	Acute Tox. 4; H302	>= 5 - < 10

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice

No hazards which require special first aid measures.

If inhaled

: Move to fresh air.

In case of skin contact

Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water.

In case of eye contact

: 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** 

: See Section 11 for more detailed information on health effects

and symptoms.

Risks

: No known significant effects or hazards.

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

Treatment

: Treat symptomatically.

#### **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

Suitable extinguishing media :

In case of fire, use water/water spray/water jet/carbon diox-

ide/sand/foam/alcohol resistant foam/chemical powder for

extinction.

#### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod- : No hazardous combustion products are known

ucts

according to Regulation (EC) No. 1907/2006

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5,3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information

Standard procedure for chemical fires.

**SECTION 6: Accidental release measures** 

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

**SECTION 7: Handling and storage** 

7.1 Precautions for safe handling

Advice on safe handling

For personal protection see section 8.

No special handling advice required.

Follow standard hygiene measures when handling chemical

products

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Hygiene measures

: When using do not eat or drink. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated

place. Store in accordance with local regulations.

Advice on common storage

: No special restrictions on storage with other products.

Further information on stor-

age stability

: 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.

according to Regulation (EC) No. 1907/2006

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#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Personal protective equipment

Eye protection

: Safety glasses

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu-

facturer specifications.

Butyl rubber/nitrile rubber gloves (0,4 mm)

Recommended: Butyl rubber/nitrile rubber gloves.

Skin and body protection

: Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing

and stirring work.

Respiratory protection

: No special measures required.

**Environmental exposure controls** 

General advice : No special environmental precautions required.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Appearance liauid Colour blue Odour odourless

Odour Threshold No data available

: Not applicable pН

Melting point/range / Freezing : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

**Evaporation rate** : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper :

flammability limit

No data available

Lower explosion limit / Lower : No data available

flammability limit

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

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Vapour pressure

: 0.01 hPa

Relative vapour density

: No data available

Density

: ca. 1 g/cm3 (20 °C)

Solubility(ies)

Water solubility

: No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature

: No data available

Decomposition temperature

: No data available

Viscosity

Viscosity, dynamic

: No data available

Viscosity, kinematic

: > 20,5 mm2/s (40 °C)

**Explosive properties** 

: No data available

Oxidizing properties

: No data available

#### 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

: No hazards to be specially mentioned.

#### 10.4 Conditions to avoid

Conditions to avoid

: No data available

#### 10.5 incompatible materials

Materials to avoid

No data available

#### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

according to Regulation (EC) No. 1907/2006

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#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Not classified based on available information.

#### Components:

#### Lithium sulphate, monohydrate:

Acute oral toxicity

: LD50 Oral (Rat): 613 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### 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.

#### Reproductive toxicity

Not classified based on available information.

#### STOT - single exposure

Not classified based on available information.

#### 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

#### SAFFTY DATA SHFFT

according to Regulation (EC) No. 1907/2006

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#### 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-

mation

: There is no data available for this product.

#### **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

waste disposal contractor.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional

local authority requirements.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

#### **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

according to Regulation (EC) No. 1907/2006

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#### 14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

: Not applicable

International Chemical Weapons Convention (CWC)

Schedules of Toxic Chemicals and Precursors

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

REACH - List of substances subject to authorisation

(Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Regulation (EC) No 850/2004 on persistent organic pol-

lutants

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals REACH Information:

: Not applicable

None of the components are listed

(=> 0.1 %).

Not applicable

Not applicable

Not applicable

: Not applicable

All substances contained in our Products are

- registered by our upstream suppliers, and/or

- registered by us, and/or

- excluded from the regulation, and/or

- exempted from the registration.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Volatile organic compounds

Law on the incentive tax for volatile organic compounds

(VOCV) no VOC duties

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

Not applicable

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or : Environmental Protection Act 1990 & Subsidiary Regulations Health and Safety at Work Act 1974 & Subsidiary Regulations Control of Substances Hazardous to Health Regulations

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

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mixture:

(COSHH)

May be subject to the Control of Major Accident Hazards

Regulations (COMAH), and amendments.

#### 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** 

H302 : Harmful if swallowed.

Full text of other abbreviations

Acute Tox. : Acute toxicity

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 : Globally Harmonized System

IATA : 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

test animals)

LC50 : Median lethal concentration (concentrations of the chemical in

air that kills 50% of the test animals during the observation

period)

MARPOL : International Convention for the Prevention of Pollution from

Ships, 1973 as modified by the Protocol of 1978

OEL : Occupational Exposure Limit

PBT : Persistent, bioaccumulative and toxic PNEC : Predicted no effect concentration

REACH : Regulation (EC) No 1907/2006 of the European Parliament

and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

SVHC : Substances of Very High Concern

vPvB : Very persistent and very bioaccumulative

#### **Further information**

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.

Changes as compared to previous version!

GB / EN

# SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 Sikagard®-230 MIC

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# PRODUCT DATA SHEET

# Sikagard®-230 MIC

# WATER BASED SURFACE HARDENER FOR SIKA MONOTOP®-4400 MIC

#### PRODUCT DESCRIPTION

Sikagard®-230 MIC is a 1-part, ready-to-use, water based compound specially designed for the quick surface hardening of Sika MonoTop®-4400 MIC

#### **USES**

- Quick surface hardener of Sika MonoTop®-4400 MIC Calcium aluminate mortar
- Reduces the early desiccation, plastic shrinkage cracking, dusty surface, crazing, etc.

# **CHARACTERISTICS / ADVANTAGES**

- Fast surface hardener
- Specially designed for application after Sika Mono-Top®-4400 MIC
- Reduces the early drying of Sika MonoTop®-4400
   MIC (immediate wet curing)
- Sewer back in service within one hour after application (for a limited hydraulic head)

# PRODUCT INFORMATION

Water based surface hardener	
10 litre containers. Refer to current price list for packaging variations.	
Translucent blue	
2 years from date of production	
The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.	
~1,02 kg/l	
5–7	
~4,5 %	
VOC free	
Sikagard®-230 MIC must only be used as a surface hardener for Sika Mond Top®-4400 MIC Calcium aluminate mortar.	

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# **APPLICATION INFORMATION**

Consumption

~75 to 100 ml/m2 total consumption

Consumption depends on the roughness and absorbency of the substrate. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

#### APPLICATION INSTRUCTIONS

#### SUBSTRATE QUALITY / PRE-TREATMENT

Sikagard®-230 MIC must be applied previously as a protective layer

#### **APPLICATION**

Sikagard®-230 MIC must be spray applied as soon as possible once Sika MonoTop®-4400 MIC surface finishing is complete. It is recommended to spray in 2 applications to ensure full coverage of the surface. Once the surface hardener has been applied, surface finishing of the mortar is no longer possible.

#### **CURING TREATMENT**

If the application of the Sika MonoTop®-4400 MIC was completed in a live sewer environment, replacing the sewers access covers immediately after spraying Sikagard®-230 MIC should ensure correct curing of the mortar.

In areas with low humidity, direct sun light or strong air movement e.g. due to ventilation, Sikagard®-230 MIC is not enough to provide full cure of the mortar. Protect fresh mortar after Sikagard®-230 MIC application immediately from premature drying using an appropriate curing method, e.g. moist geotextile membrane, polythene sheet, continuous water mist spray, etc.Curing compounds must not be used.

#### **CLEANING OF TOOLS**

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

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#### **LIMITATIONS**

For environments with lower humidity or with exposure to direct sunlight and/or strong air movement, Sikagard®-230 MIC application should be complemented with water curing.

#### **VALUE BASE**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

#### LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

# **ECOLOGY, HEALTH AND SAFETY**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

#### **LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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