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

1.1 Product identifier
Trade name: Sika® MonoTop®-412 N

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 Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
Telephone: +44 (0)1707 394444
Telefax: +44 (0)1707 329129
E-mail address of person responsible for the SDS: EHS@uk.sika.com

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)
Skin irritation, Category 2
H315: Causes skin irritation.

Serious eye damage, Category 1
H318: Causes serious eye damage.

Specific target organ toxicity - single exposure, Category 3, Respiratory system
H335: May cause respiratory irritation.

2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)
Hazard pictograms:

Signal word: Danger

Hazard statements:
H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary statements:
P101: If medical advice is needed, have product...
container or label at hand.
P102 Keep out of reach of children.

Prevention:
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Disposal:
P501 Dispose of contents/container in accordance with local regulation.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Chemical name</th>
<th>CAS-No. EC-No. Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cement (chromium reduced)</td>
<td>65997-15-1  266-043-4</td>
<td>Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335</td>
<td>&gt;= 25 - &lt; 40</td>
</tr>
<tr>
<td></td>
<td>Substances with a workplace exposure limit :</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quartz (SiO2)</td>
<td>14808-60-7  238-878-4</td>
<td></td>
<td>&gt;= 60 - &lt; 80</td>
</tr>
<tr>
<td></td>
<td>Limestone</td>
<td>1317-65-3  215-279-6</td>
<td></td>
<td>&gt;= 1 - &lt; 2.5</td>
</tr>
<tr>
<td></td>
<td>Contains: Quartz (SiO2) &lt;5µm</td>
<td>&gt;= 0.1 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Country GB 000000129581 2 / 14
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:
Cough
Respiratory disorder
Excessive lachrymation
Erythema
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Risks:
irritant effects
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

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 dioxide/sand/foam/alcohol resistant foam/chemical powder for
5.2 Special hazards arising from the substance or mixture
   Hazardous combustion products: No hazardous combustion products 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 chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   Personal precautions: Use personal protective equipment. Avoid breathing dust. Deny access to unprotected persons.

6.2 Environmental precautions
   Environmental precautions: Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up
   Methods for cleaning up: Pick up and arrange disposal without creating dust. 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: 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 application 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, 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.

Further information on storage stability: 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

<table>
<thead>
<tr>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
</tr>
<tr>
<td>Cement (chromium reduced)</td>
</tr>
</tbody>
</table>

Further information: Carcinogens or mutagens
TWA (Respirable dust) | 0,1 mg/m3 (Silica) | GB EH40

Further information
For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.
those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3. General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m\(^{-3}\) 8-hour TWA of inhalable dust or 4 mg.m\(^{-3}\) 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WELs, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>TWA (Respirable dust)</th>
<th>GB EH40</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 mg/m(^{3})</td>
<td></td>
</tr>
</tbody>
</table>

Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3. General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m\(^{-3}\) 8-hour TWA of inhalable dust or 4 mg.m\(^{-3}\) 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WELs, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>TWA (inhalable dust)</th>
<th>GB EH40</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mg/m(^{3})</td>
<td></td>
</tr>
</tbody>
</table>

Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3. General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m\(^{-3}\) 8-hour TWA of inhalable dust or 4 mg.m\(^{-3}\) 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WELs, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.
been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

### General dust value

<table>
<thead>
<tr>
<th>Form of exposure</th>
<th>Value type</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalable</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>GB EH40</td>
</tr>
<tr>
<td>Respirable</td>
<td>TWA</td>
<td>4 mg/m3</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

### Exposure controls

#### Personal protective equipment

**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-
proven standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer 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 additionally 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 working 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 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiratory protection measures must be used.

Environmental exposure controls
- General advice: Try to prevent the material from entering drains or water courses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>powder</td>
</tr>
<tr>
<td>Colour</td>
<td>grey</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>ca. &gt; 11</td>
</tr>
<tr>
<td></td>
<td>Concentration: 500 g/l</td>
</tr>
<tr>
<td>Melting point/range / Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
</tbody>
</table>
### 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
   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.

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.
   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 information : 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.

European Waste Catalogue : 17 01 01 concrete

Contaminated packaging : 15 01 10* packaging containing residues of or contaminated by dangerous substances

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
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

International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors

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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
Cement (chromium reduced)
(Number on list 47)

REACH Information: 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.

Not applicable

Volatile organic compounds : Law on the incentive tax for volatile organic compounds (VOCV)
Volatile organic compounds (VOC) content: < 0,01 %
no VOC duties

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 mixture:
- Environmental Protection Act 1990 & Subsidiary Regulations
- Health and Safety at Work Act 1974 & Subsidiary Regulations
- Control of Substances Hazardous to Health Regulations (COSHH)
- May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

Other regulations:
This product contains cement. Wet cement or mortar may cause alkali burns if in direct and/or prolonged contact with the skin. Wear protective clothing at all times when working with cement based products.

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

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
H315 : Causes skin irritation.
H318 : Causes serious eye damage.
H335 : May cause respiratory irritation.

Full text of other abbreviations
Eye Dam. : Serious eye damage
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure
2004/37/EC : Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
2004/37/EC / TWA : Long term exposure limit
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Sika® MonoTop®-412 N

Revision Date 26.02.2019  Version 1.0  Print Date 26.02.2019

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 dose (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)
OEL : Occupational Exposure Limit
PBT : Persistent, bioaccumulative and toxic
PNEC : Predicted no effect concentration
SVHC : Substances of Very High Concern
vPvB : Very persistent and very bioaccumulative

Further information
Classification of the mixture: Classification 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.

Changes as compared to previous version!

GB / EN