

#### **Safety Data Sheet**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

#### **BIOCALCE INTONACHINO TIPO 00**

Date of first edition: 10/6/2021 Safety Data Sheet dated 11/22/2021

version 4

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

#### 1.1. Product identifier

Mixture identification:

Trade name: BIOCALCE INTONACHINO TIPO 00

Trade code: BC SK0277 .040

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

Recommended use: Natural Hydraulic Lime Mortar

Uses advised against: Data not available.

#### 1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

#### 1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

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





# 2.1. Classification of the substance or mixture

# Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

STOT SE 3 May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

# 2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

#### **Pictograms and Signal Words**



Danger

# **Hazard statements**

H315 Causes skin irritation.

H318 Causes serious eye damage.H335 May cause respiratory irritation.

# **Precautionary statements**

P260 Do not breathe dust.

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 1 of 13

P280 Wear protective gloves and eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P33 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

8 to do. Continue rinsing.

P501 Dispose of contents/container in accordance with applicable regulations.

#### **Contains**

Natural Hydraulic Lime

Calcium dihydroxide

# Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances

present in concentration >= 0.1%.

Other Hazards: The product contains substances reacting with water and creating a caustic mixture. This mixture becames no longer caustic upon ageing, until diseappearance of any risk when hardening is complete. Depending on the nature and amount of its

constituent substances, the product can exhibit hazard labelling, as reported on point 2.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

N.A.

# 3.2. Mixtures

Mixture identification: BIOCALCE INTONACHINO TIPO 00

### Hazardous components within the meaning of the CLP regulation and related classification:

| Qty       | Name                   | Ident. Numb.                   | Classification  | <b>Registration Number</b> |
|-----------|------------------------|--------------------------------|---|----------------------------|
| 20-24,9 % | Natural Hydraulic Lime | CAS:85117-09-5<br>EC:285-561-1 | Skin Irrit. 2, H315; Eye Dam. 1,<br>H318; STOT SE 3, H335 |                            |
| 5-9,9 %   | Calcium dihydroxide    | CAS:1305-62-0<br>EC:215-137-3  | Skin Irrit. 2, H315; Eye Dam. 1,<br>H318; STOT SE 3, H335 | 01-2119475151-45           |

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

# 4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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

#### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 2 of 13

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

#### 6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

# 7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

# 7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

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

# 8.1. Control parameters

# **Community Occupational Exposure Limits (OEL)**

| Component         | OEL Type | Country   | Ceiling | Long<br>Term<br>mg/m3 | Long<br>Term<br>ppm | Short<br>Term<br>mg/m3 | Short<br>Term<br>ppm | Notes  |
|-------------------|----------|-----------|---------|-----------------------|---------------------|------------------------|----------------------|--|
| Calcium carbonate | NATIONAL | AUSTRALIA |         | 10.000                |                     |                        |                      | This value is for inhalable dust containing no asbestos and <1 % crystalline silica. |
|                   | NATIONAL | CANADA    |         | 10.000                |                     |                        |                      |  |
|                   | NATIONAL | FRANCE    |         | 10.000                |                     |                        |                      | inhalable aerosol  |
|                   | NATIONAL | HUNGARY   |         | 10.000                |                     |                        |                      | inhalable aerosol  |
|                   | NATIONAL | IRELAND   |         | 10.000                |                     |                        |                      | Inhalable fraction   |

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 3 of 13

|                     | NATIONAL | IRELAND  | 4.000  |        | Respirable fraction  |
|---------------------|----------|--|--------|--------|--|
|                     | NATIONAL | LATVIA   | 6.000  |        |  |
|                     | NATIONAL | NEW<br>ZEALAND   | 10.000 |        | The value for inhalable dust containing no asbestos and less than 1% free silica.              |
|                     | NATIONAL | POLAND   | 10.000 |        |  |
|                     | NATIONAL | SINGAPORE  | 10.000 |        | (limestone, marble)  |
|                     | NATIONAL | SWITZERLA<br>ND  | 3.000  |        | respirable aerosol   |
|                     | NATIONAL | UNITED<br>STATES OF<br>AMERICA   | 15.000 |        | total dust   |
|                     | NATIONAL | UNITED<br>STATES OF<br>AMERICA   | 5.000  |        | respirable dust  |
|                     | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND                   | 10.000 |        | inhalable aerosol  |
|                     | NATIONAL | UNITED<br>KINGDOM<br>OF GREAT<br>BRITAIN<br>AND<br>NORTHERN<br>IRELAND | 4.000  |        | respirable aerosol   |
|                     | NATIONAL | ITALY  | 10.000 |        |  |
|                     | NATIONAL | BELGIUM  | 10.000 |        |  |
|                     | NATIONAL | KOREA,<br>REPUBLIC<br>OF   | 10.000 |        |  |
|                     | NATIONAL | CROATIA  | 10.000 |        |  |
|                     | NATIONAL | NETHERLA<br>NDS  | 10.000 |        |  |
|                     | NATIONAL | PORTUGAL   | 10.000 |        |  |
|                     | NATIONAL | SPAIN  | 10.000 |        |  |
|                     | NATIONAL | CHILE  | 5.000  |        | respirable fraction  |
| Calcium dihydroxide | NATIONAL | AUSTRALIA  | 5.000  |        |  |
|                     | NATIONAL | AUSTRIA  | 1.000  |        | Inhalable fraction   |
|                     | NATIONAL | AUSTRIA C  |        | 4.000  | Inhalable fraction   |
|                     | NATIONAL | BELGIUM  | 5.000  |        |  |
|                     | NATIONAL | CANADA   | 5.000  |        | Ontario  |
|                     | NATIONAL | CANADA   | 5.000  |        | Quebec   |
|                     |          | DENMARK  | 5.000  | 10.000 | Quotata.   |
|                     | NATIONAL |  | 1.000  | 4.000  |  |
|                     | NATIONAL |  | 1.000  | 4.000  | Italics type: Indicative statutory limit values; long term and short term: respirable fraction |
|                     | NATIONAL | GERMANY  | 1.000  | 2.000  | ASG; Long term and short term: inhalable fraction  |
|                     | NATIONAL | GERMANY  | 1.000  | 2.000  | DFG; Long term and short term: inhalable aerosol   |
|                     | NATIONAL | HUNGARY  | 5.000  |        |  |
|                     | NATIONAL | IRELAND  | 5.000  |        |  |
|                     | NATIONAL | LATVIA   | 1.000  | 4.000  | Long term and short term:  |

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 4 of 13

|          |  |        |       | '   |
|----------|--|--------|-------|---|
| NATIONAL | NEW<br>ZEALAND   | 5.000  |       |   |
| NATIONAL | ROMANIA  | 1.000  | 4.000 | Long term and short term: respirable fraction |
| NATIONAL | SINGAPORE  | 5.000  |       |   |
| NATIONAL |  | 5.000  |       |   |
| NATIONAL |  | 1.000  | 4.000 | Long term and short term: respirable fraction |
| NATIONAL | SWITZERLA<br>ND  | 5.000  |       | Inhalable aerosol                             |
| NATIONAL | TURKEY   | 5.000  |       |   |
| NATIONAL | UNITED<br>STATES OF<br>AMERICA   | 5.000  |       | NIOSH   |
| NATIONAL | UNITED<br>STATES OF<br>AMERICA   | 15.000 |       | OSHA; inhalable aerosol                       |
| NATIONAL | UNITED<br>STATES OF<br>AMERICA   | 5.000  |       | OSHA; respirable aerosol                      |
| NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND                   | 5.000  |       | Inhalable fraction                            |
| NATIONAL | UNITED<br>KINGDOM<br>OF GREAT<br>BRITAIN<br>AND<br>NORTHERN<br>IRELAND | 1.000  |       | Respirable fraction                           |
| NATIONAL | ITALY  | 1.000  | 4.000 |   |
| NATIONAL | ARGENTINA  | 5.000  |       |   |
| NATIONAL | KOREA,<br>REPUBLIC<br>OF   | 5.000  |       |   |
| NATIONAL | INDONESIA  | 5.000  |       |   |
| NATIONAL | MALAYSIA   | 5.000  |       |   |
| NATIONAL | MEXICO   | 5.000  |       |   |
| NATIONAL | PORTUGAL   | 5.000  |       |   |
| NATIONAL |  | 5.000  |       |   |
| NATIONAL | TAIWAN,<br>PROVINCE<br>OF CHINA  | 5.000  |       |   |
| NATIONAL | BULGARIA   | 1.000  | 4.000 |   |
| NATIONAL |  | 1.000  | 4.000 |   |
| NATIONAL |  | 1.000  | 4.000 | Long term and short term: respirable dust     |
| NATIONAL | ESTONIA  | 1.000  | 4.000 |   |
| NATIONAL |  | 1.000  | 4.000 |   |
|          | LITHUANIA  | 1.000  | 4.000 |   |
| NATIONAL |  | 1.000  | 4.000 |   |
| NATIONAL |  | 1.000  | 4.000 |   |
|          |  |        |       |   |

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 5 of 13

|           | NATIONAL | SLOVAKIA   | 1.000  | 4.000 |       |  |
|-----------|----------|--|--------|-------|-------|--|
|           | NATIONAL | SLOVENIA   | 1.000  | 4.000 |       |  |
|           | NATIONAL | RUSSIAN<br>FEDERATIO                                 |        |       | 2.000 |  |
|           |          | N N  |        |       |       |  |
|           | NATIONAL | POLAND   | 2.000  | 6.000 |       | Long term and short term: inhalable fraction   |
|           | NATIONAL | POLAND   | 1.000  | 4.000 |       | Long term and short term: respirable fraction  |
|           | ACGIH    | NNN  | 5      |       |       | Eye, URT and skin irr  |
|           | EU       | NNN  | 1      | 4     |       | Respirable fraction  |
| Limestone | NATIONAL | BELGIUM  | 10.000 |       |       |  |
|           | NATIONAL | HUNGARY  | 10.000 |       |       | Inhalable aerosol  |
|           | NATIONAL | CHINA  | 8.000  |       |       | Inhalable fraction   |
|           | NATIONAL | CHINA  | 4.000  |       |       | Inhalable aerosol  |
|           | NATIONAL | KOREA,<br>REPUBLIC<br>OF                             | 10.000 |       |       |  |
|           | NATIONAL | JAPAN  | 2.000  |       |       | Respirable dust  |
|           | NATIONAL | JAPAN  | 8.000  |       |       | Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler |
|           | NATIONAL | SPAIN  | 10.000 |       |       | Inhalable aerosol  |
|           | NATIONAL | SWITZERLA<br>ND                                      | 3.000  |       |       | Respirable aerosol   |
|           | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 15.000 |       |       | OSHA: Total dust   |
|           | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 5.000  |       |       | OSHA: Respirable dust  |
|           | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 10.000 |       |       | NIOSH: total dust, calcium carbonate   |
|           | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 5.000  |       |       | NIOSH: Respirable aerosol, calcium carbonate   |
|           | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000 |       |       | Inhalable aerosol  |
|           | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 4.000  |       |       | Respirable aerosol   |
|           | NATIONAL | ITALY  | 10.000 |       |       | Come particelle non altrimenti specificate PNOC  |
|           | NATIONAL | CROATIA  | 10.000 |       |       |  |
|           | NATIONAL | FRANCE   | 10.000 |       |       |  |
|           | NATIONAL | NETHERLA<br>NDS                                      | 10.000 |       |       |  |
|           | NATIONAL | PORTUGAL   | 10.000 |       |       |  |

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 6 of 13

| Kaolin          | NATIONAL | AUSTRALIA  | 10.000 |       | This value is for inhalable dust containing no asbestos and < 1% crystalline silica.   |
|-----------------|----------|--|--------|-------|--|
|                 | NATIONAL | BELGIUM  | 2.000  |       |  |
|                 | NATIONAL | CANADA   | 2.000  |       | Canada Ontario. Respirable aerosol. The value for this particulate matter containing no asbestos and<1 percent crystalline silica. |
|                 | NATIONAL | CANADA   | 5.000  |       | Canada Québec  |
|                 | NATIONAL | DENMARK  | 2.000  | 4.000 | Respirable aerosol   |
|                 | NATIONAL | FINLAND  | 2.000  |       | Respirable fraction  |
|                 | NATIONAL | FRANCE   | 10.000 |       | Respirable aerosol   |
|                 | NATIONAL | IRELAND  | 2.000  |       |  |
|                 | NATIONAL | NEW<br>ZEALAND                                       | 10.000 |       | Inhalable aerosol  |
|                 | NATIONAL | NEW<br>ZEALAND                                       | 2.000  |       | Respirable aerosol   |
|                 | NATIONAL | SWITZERLA<br>ND                                      | 3.000  |       | Respirable aerosol   |
|                 | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 15.000 |       | OSHA: Total dust   |
|                 | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 5.000  |       | OSHA: Respirable dust  |
|                 | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 10.000 |       | NIOSH: Respirable dust   |
|                 | NATIONAL | UNITED<br>STATES OF<br>AMERICA                       | 5.000  |       | NIOSH: Respirable fraction   |
|                 | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 2.000  |       | Respirable aerosol   |
|                 | ACGIH    | NNN  | 2      |       | (E,R), A4 - Pneumoconiosis   |
| sodium chloride | NATIONAL | LATVIA   | 5.000  |       |  |
|                 |          | LITHUANIA  | 5.000  |       |  |
|                 | NATIONAL | RUSSIAN<br>FEDERATIO<br>N                            |        | 5.000 |  |

# **Predicted No Effect Concentration (PNEC) values**

| Component              | CAS-No.    | PNEC Limit     | Exposure Route                       | <b>Exposure Frequency</b> |
|------------------------|------------|----------------|--------------------------------------|---------------------------|
| Natural Hydraulic Lime | 85117-09-5 | 574.000 μg/l   | Freshwater                           |                           |
|                        |            | 574.000 μg/l   | Intermittent releases (freshwater)   |                           |
|                        |            | 374.000 μg/l   | Marine water                         |                           |
|                        |            | 374.000 μg/l   | Intermittent releases (marine water) |                           |
|                        |            | 3.511 mg/l     | Microorganisms in sewage treatments  |                           |
|                        |            | 1262.000 mg/kg | Soil                                 |                           |
| Calcium dihydroxide    | 1305-62-0  | 490.000 μg/l   | Freshwater                           |                           |
|                        |            | 490.000 µg/l   | Intermittent releases                |                           |
|                        |            |                |                                      |                           |

(freshwater)

320.000 µg/l

Marine water

3.000 mg/l

Microorganisms in sewage

treatments

1080.000 mg/kg Soil

# **Derived No Effect Level (DNEL) values**

| Component              | CAS-No.    | Worker<br>Industry | Worker<br>Professional  | Consumer                | Exposure<br>Route   | <b>Exposure Frequency</b>    |
|------------------------|------------|--------------------|-------------------------|-------------------------|---------------------|------------------------------|
| Natural Hydraulic Lime | 85117-09-5 | 5                  | 1.000 mg/m <sup>3</sup> | 1.000 mg/m <sup>3</sup> | Human Dermal        | Long Term, systemic effects  |
|                        |            |                    | 4.000 mg/m <sup>3</sup> | 4.000 mg/m <sup>3</sup> | Human Dermal        | Short Term, systemic effects |
| Calcium dihydroxide    | 1305-62-0  |                    | 1.000 mg/m <sup>3</sup> | 1.000 mg/m <sup>3</sup> | Human<br>Inhalation | Long Term, local effects     |
|                        |            |                    | 4.000 mg/m <sup>3</sup> | 4.000 mg/m <sup>3</sup> | Human<br>Inhalation | Short Term, local effects    |

#### 8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Safety shoes.

Protection for hands:

Neoprene, Nitrile rubber.

Respiratory protection:

Particle filter P2.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

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

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

Physical State Solid Color: White Odour: Odourless Odour threshold: N.A.

pH: >=12.50 <= 12.80 Notes 1%

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 0.74 g/cm3
Solubility in water: Slightly soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A. Decomposition temperature: N.A.

 $Flammability \colon N.A.$ 

Volatile Organic compounds - VOCs = 0 %; 0 g/l

**Particle characteristics:** 

Particle size: N.A. **9.2. Other information** 

Miscibility: N.A. Conductivity: N.A.

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 8 of 13

#### Evaporation rate: N.A.

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Stable under normal conditions

#### 10.2. Chemical stability

Data not available.

#### 10.3. Possibility of hazardous reactions

None

#### 10.4. Conditions to avoid

Stable under normal conditions.

#### 10.5. Incompatible materials

None in particular.

#### 10.6. Hazardous decomposition products

None.

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

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 **Toxicological Information of the Preparation**

Not classified a) acute toxicity

Based on available data, the classification criteria are not met

The product is classified: Skin Irrit. 2(H315) b) skin corrosion/irritation c) serious eye damage/irritation The product is classified: Eye Dam. 1(H318)

d) respiratory or skin sensitisation Not classified

Based on available data, the classification criteria are not met

Not classified e) germ cell mutagenicity

Based on available data, the classification criteria are not met

Not classified f) carcinogenicity

Based on available data, the classification criteria are not met

Not classified g) reproductive toxicity

Based on available data, the classification criteria are not met

h) STOT-single exposure The product is classified: STOT SE 3(H335) i) STOT-repeated exposure

Not classified Based on available data, the classification criteria are not met

Not classified j) aspiration hazard

Based on available data, the classification criteria are not met

# Toxicological information on main components of the mixture:

Natural Hydraulic Lime a) acute toxicity LD50 Oral Rat > 2000.00 mg/kg

> LC50 Inhalation Dust Rat > 6.04 mg/l 4h LD50 Skin Rabbit > 2500.00 mg/kg 24h

b) skin corrosion/irritation Skin Irritant Rabbit Positive 4h

c) serious eye damage/irritation Eye Irritant Rabbit Yes

d) respiratory or skin

sensitisation

Skin Sensitization Negative

Mouse

g) reproductive toxicity No Observed Adverse Effect Level Oral >= 400.00 Mouse

mg/kg

Calcium dihydroxide a) acute toxicity LD50 Oral Rat > 2000.00000 mg/kg

> LC50 Inhalation Dust Rat > 6.04000 mg/l 4h LD50 Skin Rabbit > 2500.00000 mg/kg

b) skin corrosion/irritation Skin Irritant Rabbit Positive c) serious eye

damage/irritation

Eye Irritant Rabbit Yes

d) respiratory or skin

Skin Sensitization Negative

sensitisation

11/22/2021 **Production Name BIOCALCE INTONACHINO TIPO 00** Date Page n. 9 of

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties:**

No endocrine disruptor substances present in concentration >= 0.1%

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information:

#### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

#### List of Eco-Toxicological properties of the components

|                        | _  |  |
|------------------------|--|--|
| Component              | Ident. Numb.                               | Ecotox Data  |
| Natural Hydraulic Lime | CAS: 85117-09-<br>5 - EINECS:<br>285-561-1 | a) Aquatic acute toxicity: LC50 Fish rainbow trout = 50.60 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test) |
|                        |  | a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = $49.10 \text{ mg/L} 48\text{h}$ OECD 202                    |
|                        |  | b) Aquatic chronic toxicity : NOEC Crangon septemspinosa = $32.00 \text{ mg/L} - 14 \text{days}$                     |
|                        |  | d) Terrestrial toxicity: NOEC Worm Eisenia fetida = 2000.00 mg/kg  |
|                        |  | e) Plant toxicity: EC10 = 1080.00 mg/kg  |
| Calcium dihydroxide    | CAS: 1305-62-0<br>- EINECS: 215-<br>137-3  | a) Aquatic acute toxicity: LC50 Fish rainbow trout = 50.60000 mg/L 96h   |
|                        |  | a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna = 49.10000 mg/L  |

- b) Aquatic chronic toxicity: NOEC Crangon septemspinosa = 32.00000 mg/L 48h - 14days
- a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 184.57000 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test)
- a) Aquatic acute toxicity: EC50 Sludge activated sludge = 300.40000 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test
- d) Terrestrial toxicity: NOEC Worm Eisenia fetida = 2000.00000 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests)
- d) Terrestrial toxicity: EC10 soil microorganisms = 4000.00000 mg/kg ,,Guideline: BBA VI, 1-1 (1990) under consideration of OECD 216 (2000) and OECD 217 (2000).

#### 12.2. Persistence and degradability

N.A.

# 12.3. Bioaccumulative potential

#### 12.4. Mobility in soil

# 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

#### 12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >=0.1%

# 12.7 Other adverse effects

N.A.

# **SECTION 13: Disposal considerations**

Date 11/22/2021 **Production Name BIOCALCE INTONACHINO TIPO 00** Page n. 10 of 13

#### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

#### Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 4: Irritant — skin irritation and eye damage; HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

# **SECTION 14: Transport information**

#### 14.1. UN number or ID number

N/A

#### 14.2. UN proper shipping name

ADR-Shipping Name: N/A IATA-Technical name: N/A IMDG-Technical name: N/A

#### 14.3. Transport hazard class(es)

ADR-Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

#### 14.4. Packing group

ADR-Packing Group: N/A IATA-Packing group: N/A IMDG-Packing group: N/A

#### 14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

# 14.6. Special precautions for user

Road and Rail ( ADR-RID ):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A ADR Excepted Quantities: N/A

#### Air (IATA):

IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

Sea ( IMDG ):

IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A
IMDG-Subsidiary hazards: N/A
IMDG-Special Provisioning: N/A

#### 14.7. Maritime transport in bulk according to IMO instruments

N.A.

# **SECTION 15: Regulatory information**

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 11 of 13

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

#### Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

#### **SECTION 16: Other information**

| Code              | Description  |  |
|-------------------|--|--|
| H315              | Causes skin irritation.                                  |  |
| H318              | Causes serious eye damage.                               |  |
| H335              | May cause respiratory irritation.                        |  |
|                   |  |  |
| Code              | Hazard class and hazard category                         | Description                                    |
| <b>Code</b> 3.2/2 | <b>Hazard class and hazard category</b><br>Skin Irrit. 2 | <b>Description</b> Skin irritation, Category 2 |
|                   | <b>5</b> ,   | •  |

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure   |
|---|----------------------------|
| 3.2/2   | Calculation method         |
| 3.3/1   | On basis of test data (pH) |
| 3 8/3   | Calculation method         |

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 12 of 13

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

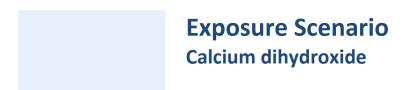
vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

# Paragraphs modified from the previous revision:

- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

Date 11/22/2021 Production Name BIOCALCE INTONACHINO TIPO 00 Page n. 13 of 13



# Exposure Scenario, 24/06/2021

| Substance identity  |                     |
|---------------------|---------------------|
|                     | Calcium dihydroxide |
| CAS No.             | 1305-62-0           |
| EINECS No.          | 215-137-3           |
| Registration number | 01-2119475151-45    |

# Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b, PC15)

# 1. ES 1 Widespread use by professional workers; Various products (PC9a, PC9b, PC15)

| 4 | 4 | - | _ |   | _ | • | _ | ~~ | <br>$\overline{}$ | R I |
|---|---|---|---|---|---|---|---|----|-------------------|-----|
| • |   |   |   |   | - | S | - |    | 0                 | N   |
|   | _ |   |   | _ | _ | _ | _ | _  | <br>_             | ıv  |

| Exposure Scenario name    | Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants   |
|---------------------------|--|
| Date - Version            | 24/06/2021 - 1.0   |
| Life Cycle Stage          | Widespread use by professional workers   |
| Main user group           | Professional uses  |
| Sector(s) of use          | Professional uses (SU22)   |
| <b>Product Categories</b> | Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b) - Non-metal surface treatment products (PC15) |

# **Environment Contributing Scenario**

| CS1  | ERC8c - ERC8f |
|--|---------------|
| Worker Contributing Scenario   |               |
| CS2 Material transfers   | PROC8a        |
| CS3 Hand application - finger paints, pastels, adhesives - Rolling, Brushing | PROC10        |
| CS4 Mixing operations - Manual   | PROC19        |

# 1.2 Conditions of use affecting exposure

# 1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

| <b>Environmental release</b> | Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to |
|------------------------------|--|
| categories                   | inclusion into/onto article (outdoor) (ERC8c, ERC8f)                                       |

# **Product (article) characteristics**

# **Physical form of product:**

Solid, medium dustiness

# Vapour pressure:

< 1E-05 Pa

# 1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

| <b>Process Categories</b> | Transfer of substance or mixture (charging and discharging) at non-dedicated facilities |
|---------------------------|---|
|                           | (PROC8a)  |

# **Product (article) characteristics**

#### Physical form of product:

Solid, medium dustiness

# Amount used, frequency and duration of use/exposure

# **Duration:**

Exposure duration <= 480 min

# Technical and organisational conditions and measures

# **Technical and organisational measures**

| Ensure operatives are trained to minimise exposures.  Avoid direct eye contact with product, also via contamination on hands.  Do not ingest.  Local exhaust ventilation | Inhalation - minimum efficiency of: 72 % |
|--|--|
|--|--|

Conditions and measures related to personal protection, hygiene and health evaluation

#### **Personal protection**

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable face shield.

# Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Covers use at ambient temperatures.

#### **Body parts exposed:**

Assumes that potential dermal contact is limited to upper part of the body.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

#### **Additional Good Practice Advice:**

Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.

# 1.2. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)

**Process Categories** 

Roller application or brushing (PROC10)

# **Product (article) characteristics**

#### Physical form of product:

Solid, medium dustiness

Amount used, frequency and duration of use/exposure

#### **Duration:**

Exposure duration <= 480 min

Technical and organisational conditions and measures

#### **Technical and organisational measures**

Ensure operatives are trained to minimise exposures.

Avoid direct eye contact with product, also via contamination on hands.

Do not ingest.

Conditions and measures related to personal protection, hygiene and health evaluation

#### **Personal protection**

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable face shield.

# Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

**Temperature:** Covers use at ambient temperatures.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

# **Additional Good Practice Advice:**

Ensure control measures are regularly inspected and maintained. Prevent leaks and prevent soil / water pollution caused by leaks.

# 1.2. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

**Process Categories** 

Manual activities involving hand contact (PROC19)

#### **Product (article) characteristics**

#### Physical form of product:

Solid, medium dustiness

Amount used, frequency and duration of use/exposure

#### **Duration:**

Exposure duration <= 240 min

Technical and organisational conditions and measures

#### **Technical and organisational measures**

Ensure operatives are trained to minimise exposures.

Avoid direct eye contact with product, also via contamination on hands.

Do not ingest.

Local exhaust ventilation

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

#### Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable face shield.

## Other conditions affecting worker exposure

Outdoor use

Professional use

Temperature: Covers use at ambient temperatures.

#### **Body parts exposed:**

Assumes that potential dermal contact is limited to upper part of the body.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

# **Additional Good Practice Advice:**

Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.

# 1.3 Exposure estimation and reference to its source

# 1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

| protection target | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|-------------------|----------------|--------------------|-----------------------------------|
| soil              | N/A            | N/A                | = 0.65                            |

#### 1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

# 1.3. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

# Additional information on exposure estimation:

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

# 1.3. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

# 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

#### Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least

equivalent levels.



# Exposure Scenario, 08/06/2021

| Substance identity |                            |  |
|--------------------|----------------------------|--|
|                    | Lime (chemical), hydraulic |  |
| CAS No.            | 85117-09-5                 |  |
| EINECS No.         | 285-561-1                  |  |

# Table of contents

1. **ES 1** Service life - workers; Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)

# 1. ES 1 Service life - workers; Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)

| 1 | 1 | TI | TIF | : 5 | FC. | TIC | N |
|---|---|----|-----|-----|-----|-----|---|
|   |   |    |     |     |     |     |   |

| Exposure Scenario name | Road and construction applications - Professional use of floor care products - Tackifier   |
|------------------------|--|
| Date - Version         | 20/05/2021 - 1.0   |
| Life Cycle Stage       | Service life - workers   |
| Main user group        | Professional uses  |
| Sector(s) of use       | Professional uses (SU22)   |
| Product Categories     | Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15) |
| Article Category(ies)  | Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)   |

#### **Environment Contributing Scenario**

| CS1 Low environmental release | ERC2 |
|-------------------------------|------|
|-------------------------------|------|

# **Worker Contributing Scenario**

CS2 Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers

PROC8b - PROC9 - PROC26

# 1.2 Conditions of use affecting exposure

# 1.2. CS1: Environment Contributing Scenario: Low environmental release (ERC2)

| <b>Environmental release</b> | Formulation into mixture (ERC2) |  |  |
|------------------------------|---------------------------------|--|--|
| categories                   |                                 |  |  |

# **Product (article) characteristics**

#### Physical form of product:

Solid, very high dustiness

### Vapour pressure:

< 1E-05 Pa

1.2. CS2: Worker Contributing Scenario: Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers (PROC8b, PROC9. PROC26)

| T MOCS, T MOCEO,          |  |
|---------------------------|--|
| <b>Process Categories</b> | Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer |
|                           | of substance or mixture into small containers (dedicated filling line, including weighing) -   |
|                           | Handling of solid inorganic substances at ambient temperature (PROC8b, PROC9, PROC26)          |

# **Product (article) characteristics**

# Physical form of product:

Solid, very high dustiness

Amount used, frequency and duration of use/exposure

#### **Duration:**

Exposure duration <= 240 min

#### Frequency:

Use frequency = 8 h/event

Technical and organisational conditions and measures

# **Technical and organisational measures**

Provide a basic standard of general ventilation (1 to 3 air changes per hour). Do not ingest.

Conditions and measures related to personal protection, hygiene and health evaluation

# **Personal protection**

Wear suitable gloves tested to EN374.

Use eye protection according to EN 166.

Wear a respirator conforming to EN140.

# Other conditions affecting worker exposure

Indoor use Professional use

Temperature: Covers use at ambient temperatures. 23°C

# 1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers (PROC8b, PROC9, PROC26)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative, local, short-term                     | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

# Additional information on exposure estimation:

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

# 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

# Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.