

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

Poxy Color Green RAL6024

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

1.1. Product identifier

Product name : Poxy Color Green RAL6024
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Dyestuff

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
☎ +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

EUH210 Safety data sheet available on request.
EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

2.3. Other hazards

Caution! Substance is absorbed through the skin
Warning! Slipping risk

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name REACH Registration No | CAS No EC No | Conc. (C) | Classification according to CLP | Note | Remark | M-factors and ATE |
|--|-------------------------|---------------|---------------------------------|---------|-------------|----------------------|
| antimony-nickel-titanium-oxide-yellow 01-2119491302-44 | 8007-18-9 232-353-3 | 10% ≤C<25% | | (2)(10) | Constituent | |
| chromium (III) oxide 01-2119433951-39 | 1308-38-9 215-160-9 | 1%≤C<10% | | (2) | Constituent | |
| calcium fluoride | 7789-75-5 232-188-7 | 1%≤C<10% | | (2) | Constituent | |
| quartz (SiO ₂) | 14808-60-7 238-878-4 | C>1% | | (2) | Constituent | |
| titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] 01-2119489379-17 | 13463-67-7 236-675-5 | C>1% | Carc. 2; H351 | (1)(2) | Constituent | |
| barium sulfate | 7727-43-7 231-784-4 | C>1% | | (2) | Constituent | |

- (1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, consult a doctor/medical service.

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

After eye contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:

Not applicable.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (hydrofluoric acid) and formation of metal oxides.

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent dust cloud formation, e.g. by wetting. No naked flames. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product.

6.3. Methods and material for containment and cleaning up

Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Avoid raising dust. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Protect against frost. Keep out of direct sunlight.

7.2.2 Keep away from:

Heat sources, oxidizing agents, reducing agents, (strong) acids, (strong) bases.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

| | | |
|---|---|----------------------------|
| Fluorides, inorganic | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 2.5 mg/m ³ |
| Inorganic Chromium (III) Compounds (insoluble) | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 2 mg/m ³ |
| Nickel compounds <i>shall apply from 2025-01-18</i> | Time-weighted average exposure limit 8 h (Limit value for occupational exposure) | 0.01 mg/m ³ (1) |
| | Time-weighted average exposure limit 8 h (Limit value for occupational exposure) | 0.05 mg/m ³ (2) |
| Nickel compounds <i>shall apply until 2025-01-17</i> | Time-weighted average exposure limit 8 h (Limit value for occupational exposure) | 0.1 mg/m ³ (2) |
| Respirable crystalline silica dust | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 0.1 mg/m ³ (1) |

(1) (2): Respirable fraction

(2) (1): Inhalable fraction

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Belgium

| | | |
|---|--|-----------------------------------|
| Antimoine et ses composés (en Sb) | Time-weighted average exposure limit 8 h | 0.5 mg/m ³ |
| Baryum (sulfate de) (sans fibres d'amiante et | Time-weighted average exposure limit 8 h | 5 mg/m ³ |
| Chrome métal et composés inorganiques (à l'exception des composés Cr VI) | Time-weighted average exposure limit 8 h | 0.5 mg/m ³ |
| Composés du nickel, (mesurée en tant que Ni) <i>shall apply from 2025-01-18</i> | Time-weighted average exposure limit 8 h | 0.01 mg/m ³ (1) |
| | Time-weighted average exposure limit 8 h | 0.05 mg/m ³ (2) |
| Composés du nickel, (mesurée en tant que Ni) <i>shall apply until 2025-01-17</i> | Time-weighted average exposure limit 8 h | 0.1 mg/m ³ (2) |
| Fluorures inorganiques (en F) | Time-weighted average exposure limit 8 h | 2.5 mg/m ³ |
| Silices cristallines: quartz <i>shall apply from 2025-09-01</i> | Time-weighted average exposure limit 8 h | 0.05 mg/m ³ (3) |
| Silices cristallines: quartz <i>shall apply until 2025-08-31</i> | Time-weighted average exposure limit 8 h | 0.1 mg/m ³ (3) |
| Titane (dioxyde de) | Time-weighted average exposure limit 8 h | 10 mg/m ³ |

(1) Fraction alvéolaire

(2) fraction inhalable

(3) poussières alvéolaires

The Netherlands

| | | |
|---|---|------------------------------------|
| anorganische Chrom(II)verbindingen en anorganische Chrom(III)verbindingen (onoplosbaar) | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.23 ppm |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.5 mg/m ³ |
| | Short time value (Public occupational exposure limit value) | 0.46 ppm |
| | Short time value (Public occupational exposure limit value) | 1 mg/m ³ |
| Antimoon en -verbindingen (als Sb) | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.099 ppm (1) |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.5 mg/m ³ (1) |
| Fluoriden, anorganisch en oplosbaar (als F) | Short time value (Public occupational exposure limit value) | 2.5 ppm (2) |
| | Short time value (Public occupational exposure limit value) | 2 mg/m ³ (2) |
| Kristallijn silicastof - kwarts | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.03 ppm (3) |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 0.075 mg/m ³ (3) |

(1) als Sb

(2) als F

(3) respirabele fractie

France

| | | |
|--|--|----------------------------------|
| Antimoine et ses composés, en Sb | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 0.5 mg/m ³ |
| Chrome (métal), composés de chrome inorganiques (II) et composés de chrome inorganiques (insolubles) (III) | Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative) | 2 mg/m ³ |
| Fluorures inorganiques | Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative) | 2.5 mg/m ³ |
| Silices cristallines : cristobalite, quartz, tridymite | Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante) | 0.1 mg/m ³ (1) |
| Titane (dioxyde de), en Ti | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 10 mg/m ³ |

(1) La valeur limite concerne la fraction alvéolaire

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Germany

| | | |
|--|--|-----------------------------|
| Bariumsulfat | Time-weighted average exposure limit 8 h (MAK) | 0.3 mg/m ³ (1) |
| | Time-weighted average exposure limit 8 h (MAK) | 4 mg/m ³ (2) |
| | <i>ausgenommen sind ultrafeine Partikel; siehe Abschnitt V h vgl. Abschn. V f) vgl. Abschn. V f) und g)</i> | |
| Chrom und anorganische Chrom(II) und (III)-Verbindungen (ausgenommen namentlich genannte) | Time-weighted average exposure limit 8 h (TRGS 900) | 2 mg/m ³ (3) |
| | <i>Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.</i> | |
| Fluoride (als Fluor berechnet) | Time-weighted average exposure limit 8 h (TRGS 900) | 1 mg/m ³ (4) |
| Nickel und Nickelverbindungen | Time-weighted average exposure limit 8 h (TRGS 900) | 0.030 mg/m ³ (5) |
| | <i>Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.</i> | |
| | <i>Die arbeitsmedizinisch-toxikologische Ableitung des Wertes basiert auf einer Plausibilitätsbetrachtung. Auf die Werte für den A-Staub für Nickelmetall in dieser TRGS und für Nickelverbindungen in der TRGS 910 wird hingewiesen.</i> | |
| | <i>Für als Carc 1A oder 1B eingestufte Nickelverbindungen siehe TRGS 910 und TRGS 561. Eine Beurteilung anhand des AGW für Nickelmetall kann dann erfolgen, wenn ausschließlich Nickelmetall vorliegt. Sofern bei Tätigkeiten nickelhaltige Stäube entstehen, bei denen nur eine Oberflächenoxidation zu unterstellen ist, sind diese wie nickelmetallhaltige Gemische zu behandeln. Bei Anwendung von thermischen Verfahren in Gegenwart von Luftsauerstoff ist grundsätzlich eine Bildung von oxidischen Nickelverbindungen anzunehmen. Dies ist beispielsweise beim Schweißen (Elektroden oder Draht) und thermischen Schneiden mit bzw. von Legierungen, beim Metallspritzen von Legierungen, beim Schmelzen und Gießen von Legierungen und beim Schleifen und Trennen von Legierungen mit „Funkenbildung“ der Fall. Weitere Empfehlungen sowie Beispiele für Arbeitsverfahren, bei denen der AGW bzw. die ERB zur Beurteilung herangezogen werden können, enthält die IFA-Arbeitsmappe (Kennzahl 0537).</i> | |
| | <i>Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.</i> | |
| <i>Die arbeitsmedizinisch-toxikologische Ableitung des Wertes basiert auf einer Plausibilitätsbetrachtung. Auf die Werte für den A-Staub für Nickelmetall in dieser TRGS und für Nickelverbindungen in der TRGS 910 wird hingewiesen.</i> | | |
| <i>Für als Carc 1A oder 1B eingestufte Nickelverbindungen siehe TRGS 910 und TRGS 561. Eine Beurteilung anhand des AGW für Nickelmetall kann dann erfolgen, wenn ausschließlich Nickelmetall vorliegt. Sofern bei Tätigkeiten nickelhaltige Stäube entstehen, bei denen nur eine Oberflächenoxidation zu unterstellen ist, sind diese wie nickelmetallhaltige Gemische zu behandeln. Bei Anwendung von thermischen Verfahren in Gegenwart von Luftsauerstoff ist grundsätzlich eine Bildung von oxidischen Nickelverbindungen anzunehmen. Dies ist beispielsweise beim Schweißen (Elektroden oder Draht) und thermischen Schneiden mit bzw. von Legierungen, beim Metallspritzen von Legierungen, beim Schmelzen und Gießen von Legierungen und beim Schleifen und Trennen von Legierungen mit „Funkenbildung“ der Fall. Weitere Empfehlungen sowie Beispiele für Arbeitsverfahren, bei denen der AGW bzw. die ERB zur Beurteilung herangezogen werden können, enthält die IFA-Arbeitsmappe (Kennzahl 0537).</i> | | |
| Titandioxid | Time-weighted average exposure limit 8 h (MAK) | 0.3 mg/m ³ (6) |

(1) Alveolengängige Fraktion, multipliziert mit der Materialdichte; UF: II(8)

(2) Einatembare Fraktion

(3) Einatembare Fraktion; UF: 1 (I)

(4) Einatembare Fraktion; UF: 4 (II)

(5) Einatembare Fraktion; UF: 8 (II)

(6) Alveolengängige Fraktion; UF: II(8)

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Austria

| | | |
|--|-------------------------------|----------------------------|
| Antimonverbindungen (ausgenommen Antimonwasserstoff und Antimontrioxid) | Tagesmittelwert (MAK) | 0.5 mg/m ³ (1) |
| | Kurzzeitwert 15(Miw) 4x (MAK) | 1.5 mg/m ³ (1) |
| Chrommetall, anorganische Chrom(II)- und anorganische Chrom(III)-Verbindungen (unlöslich) | Tagesmittelwert (MAK) | 2 mg/m ³ (2) |
| | Tagesmittelwert (MAK) | |
| Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide, Nickelchromat und Nickel- carbonat) und Stäube von Nickelverbindungen und Nickellegierungen | Kurzzeitwert 15(Miw) 4x (TRK) | 2 mg/m ³ (3) |
| | Tagesmittelwert (TRK) | 0.5 mg/m ³ (3) |
| Nickelverbindungen in Form einatembare Tröpfchen | Kurzzeitwert 15(Miw) 4x (TRK) | 0.2 mg/m ³ (4) |
| | Tagesmittelwert (TRK) | 0.05 mg/m ³ (4) |
| Quarzfeinstaub(alveolengängiges kristallines Siliziumdioxid) | Tagesmittelwert (MAK) | 0.05 mg/m ³ (5) |
| Titandioxid (Alveolarstaub) | Tagesmittelwert (MAK) | 5 mg/m ³ (5) |
| | Kurzzeitwert 60(Miw) 2x (MAK) | 10 mg/m ³ (5) |

(1) Einatembare Fraktion; als Sb berechnet

(2) als Cr berechnet

(3) Einatembare Fraktion; als Ni berechnet

(4) Einatembare Fraktion; berechnet als Ni für den einatembaren Anteil

(5) Alveolengängige Fraktion

UK

| | | |
|--|---|---------------------------|
| Antimony and compounds except stibine (as Sb) | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 0.5 mg/m ³ |
| Barium sulphate | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 10 mg/m ³ (1) |
| | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 4 mg/m ³ (2) |
| Chromium (III) compounds (as Cr) | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 0.5 mg/m ³ |
| Fluorides (inorganic as F) | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 2.5 mg/m ³ |
| Nickel, insoluble inorganic compounds (as Ni)(except nickel tetracarbonyl) | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 0.5 mg/m ³ |
| Silica, crystalline | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 0.1 mg/m ³ (3) |
| Titanium dioxide | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 10 mg/m ³ (4) |
| | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 4 mg/m ³ (5) |

(1) Inhalable dust

(2) Respirable dust

(3) Respirable fraction

(4) Total inhalable

(5) Respirable

USA (TLV-ACGIH)

| | | |
|--|---|-----------------------------|
| Antimony and compounds, as Sb | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.5 mg/m ³ |
| Barium sulfate | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 5 mg/m ³ (1) |
| Chromium, and inorganic compounds: Trivalent chromium compounds, as Cr(III) | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.003 mg/m ³ (2) |
| Fluorides, as F | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 2.5 mg/m ³ |
| Nickel and inorganic compounds including Nickel subsulfide, as Ni: Insoluble inorganic compounds (NOS) | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.2 mg/m ³ (2) |
| Silica, crystalline - α -quartz and cristobalite | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.025 mg/m ³ (3) |
| Titanium dioxide - finescale particles | Time-weighted average exposure limit 8 h (TLV - Intended Changes) | 2.5 mg/m ³ (3) |
| Titanium dioxide - nanoscale particles | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.2 mg/m ³ (3) |

(1) I,E: Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica

(2) (I): Inhalable fraction

(3) (R): Respirable fraction

b) National biological limit values

If limit values are applicable and available these will be listed below.

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Germany

| | | | |
|--|---|--------|--|
| Hydrogenfluorid (Fluorwasserstoff) und anorganische Fluorverbindungen (Fluoride (Fluorid)) | Urin: expositionsende, bzw. schichtende | 4 mg/m | |
|--|---|--------|--|

USA (BEI-ACGIH)

| | | | |
|----------------------|-----------------------|--------|-------------------------|
| Fluorides (Fluoride) | Urine: end of shift | 3 mg/L | Background, Nonspecific |
| Fluorides (Fluoride) | Urine: prior to shift | 2 mg/L | Background, Nonspecific |

8.1.2 Sampling methods

| Product name | Test | Number |
|--|-------|-----------|
| Calcium & Cpds (as Ca) | NIOSH | 7020 |
| Fluoride | NIOSH | 8308 |
| Fluoride | OSHA | ID 110 |
| Fluorides (Aerosol & Gas) | NIOSH | 7902 |
| Fluorides (Fluorides, aerosol and gas) | NIOSH | 7906 |
| Fluorides | ASTM | D 4765-93 |
| Nickel | OSHA | ID 121 |
| Nickel | OSHA | ID 125G |
| TiO2 | NIOSH | 7302 |
| TiO2 | NIOSH | 7304 |

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

calcium fluoride

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|---------------------|--------|
| DNEL | Long-term systemic effects inhalation | 5 mg/m ³ | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|------------------------------------|------------------------|--------|
| DNEL | Long-term local effects inhalation | 1.25 mg/m ³ | |

DNEL/DMEL - General population

calcium fluoride

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|---------------------|--------|
| DNEL | Long-term systemic effects inhalation | 1 mg/m ³ | |
| | Long-term systemic effects oral | 0.02 mg/kg bw/day | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|------------------------------------|-----------------------|--------|
| DNEL | Long-term local effects inhalation | 210 µg/m ³ | |

PNEC

antimony-nickel-titanium-oxide-yellow

| Compartments | Value | Remark |
|------------------------------|-----------|--------|
| Fresh water | 0.1 mg/l | |
| Marine water | 0.01 mg/l | |
| Aqua (intermittent releases) | 1 mg/l | |
| STP | 568 mg/l | |

calcium fluoride

| Compartments | Value | Remark |
|-------------------------------------|--------------------|--------|
| Fresh water | 0.37 mg/l | |
| Fresh water (intermittent releases) | 0.17 mg/l | |
| Marine water | 0.022 mg/l | |
| STP | 104.75 mg/l | |
| Soil | 21.8 mg/kg soil dw | |

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Dust production: dust mask with filter type P3.

b) Hand protection:

Protective gloves against chemicals (EN 374).

c) Eye protection:

Safety glasses (EN 166). In case of dust production: protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

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8.2.3 Environmental exposure controls:
See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------|-------------------------------------|
| Physical form | Solid |
| | Powder |
| Colour | Green |
| Odour | Characteristic odour |
| Odour threshold | No data available in the literature |
| Melting point | No data available in the literature |
| Boiling point | No data available in the literature |
| Flammability | Not classified as flammable |
| Explosion limits | Not applicable |
| Flash point | Not applicable (solid) |
| Auto-ignition temperature | Not applicable |
| Decomposition temperature | No data available in the literature |
| pH | No data available in the literature |
| Kinematic viscosity | Not applicable (solid) |
| Dynamic viscosity | Not applicable (solid) |
| Solubility | No data available in the literature |
| Log Kow | Not applicable (mixture) |
| Vapour pressure | No data available in the literature |
| Absolute density | No data available in the literature |
| Relative density | No data available in the literature |
| Relative vapour density | Not applicable (solid) |
| Particle size | No data available in the literature |

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Avoid raising dust. Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents, reducing agents, (strong) acids, (strong) bases.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrofluoric acid) and formation of metal oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

Acute toxicity

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No (test)data on the mixture available

Judgement is based on the relevant ingredients
antimony-nickel-titanium-oxide-yellow

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|----------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | OECD 401 | > 2000 mg/kg bw | | Rat (male / female) | Experimental value | |
| Dermal | | | | | | Data waiving | |

Reason for revision: 3

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Poxy Color Green RAL6024

chromium (III) oxide

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|------------------------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | Equivalent to OECD 401 | > 5000 mg/kg bw | | Rat (male / female) | Experimental value | |
| Dermal | | | | | | Data waiving | |
| Inhalation (dust) | LC50 | OECD 403 | > 5.41 mg/l air | 4 h | Rat (male / female) | Experimental value | |

calcium fluoride

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|--------------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | OECD 423 | > 2000 mg/kg bw | | Rat (female) | Experimental value | |
| Dermal | LD50 | EPA OPP 81-2 | > 2000 mg/kg bw | 24 h | Rat (male / female) | Experimental value | |
| Inhalation (dust) | LC50 | OECD 403 | > 5.07 mg/l air | 4 h | Rat (male / female) | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|----------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | OECD 401 | > 2000 mg/kg bw | | Rat (male / female) | Experimental value | |
| Dermal | | | | | | Data waiving | |
| Inhalation (dust) | LC50 | OECD 403 | 5.09 mg/l | 4 h | Rat (male) | Experimental value | |

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement is based on the relevant ingredients

antimony-nickel-titanium-oxide-yellow

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|------------------------|---------------|------------------|---------|---------------------|----------------------------------|
| Eye | Not irritating | Equivalent to OECD 405 | | 24; 48; 72 hours | Rabbit | Experimental value | Single treatment without rinsing |
| Skin | Not irritating | Equivalent to OECD 404 | 24 h | 24; 48; 72 hours | Rabbit | Experimental value | |

chromium (III) oxide

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|----------|---------------|------------------|---------|---------------------|-------------------------------|
| Eye | Not irritating | OECD 405 | 24 h | 24; 48; 72 hours | Rabbit | Experimental value | Single treatment with rinsing |
| Skin | Not irritating | OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Experimental value | |

calcium fluoride

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|---------------------|----------|---------------|------------------|---------|---------------------|--------|
| Eye | Slightly irritating | OECD 405 | | 24; 48; 72 hours | Rabbit | Experimental value | |
| Skin | Not irritating | OECD 404 | 4 h | 24; 72 hours | Rabbit | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|------------------------|---------------|---------------------|---------|---------------------|----------------------------------|
| Eye | Not irritating | OECD 405 | | 1; 24; 48; 72 hours | Rabbit | Experimental value | Single treatment without rinsing |
| Skin | Not irritating | Equivalent to OECD 404 | 4 h | 48 hours | Rabbit | Experimental value | |

Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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Poxy Color Green RAL6024

antimony-nickel-titanium-oxide-yellow

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|----------------------|-----------------|----------|---------------|------------------------|----------------|---------------------|--------|
| Dermal (on the ears) | Not sensitizing | OECD 429 | | | Mouse (female) | Experimental value | |

chromium (III) oxide

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|-------------------|---------------|------------------------|---------------------|---------------------|--------|
| Skin | Not sensitizing | OECD 406 | | | Guinea pig (female) | Experimental value | |
| Inhalation (dust) | Not sensitizing | Human observation | | | Human | Weight of evidence | |

calcium fluoride

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|----------|---------------|------------------------|----------------|---------------------|--------|
| Skin | Not sensitizing | OECD 429 | | | Mouse (female) | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|----------------------|-----------------|------------------------|---------------|------------------------|----------------|---------------------|--------|
| Dermal (on the ears) | Not sensitizing | Equivalent to OECD 429 | | | Mouse (female) | Experimental value | |
| Inhalation (dust) | Not sensitizing | | | | Mouse (female) | Experimental value | |

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement is based on the relevant ingredients

antimony-nickel-titanium-oxide-yellow

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|------------------------|--------------------------|--------------|-------------------|---------------------|---------------------|--------|
| Oral (diet) | NOAEL | Equivalent to OECD 408 | ≥ 500 mg/kg bw/day | No effect | 90 day(s) | Rat (male / female) | Experimental value | |
| Inhalation (aerosol) | NOAEC | Subacute toxicity test | 60 mg/m ³ air | No effect | 5 days (6h / day) | Rat (male) | Experimental value | |

chromium (III) oxide

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|------------------------|---|--------------|------------------------------------|---------------------|---------------------|-----------|
| Oral (diet) | NOEL | | 286.2 mg/kg bw/day - 313.7 mg/kg bw/day | No effect | 105 week(s) | Rat (male / female) | Experimental value | Metal ion |
| Dermal | | | | | | | Data waiving | |
| Inhalation (dust) | NOEC | Equivalent to OECD 413 | 15 mg/m ³ air | No effect | 13 weeks (6h / day, 5 days / week) | Rat (male / female) | Experimental value | |

calcium fluoride

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|-----------------------|-----------|--------|---------------------------------------|--------------|---------------|---------------------|---------------------|--------|
| Oral (drinking water) | NOAEL | NTP | 2.53 mg/kg bw/day - 3.03 mg/kg bw/day | No effect | 13 week(s) | Rat (male / female) | Experimental value | |
| Dermal | | | | | | | Data waiving | |
| Inhalation (dust) | | | | | | | Data waiving | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|--------------------------|---------------------------|--------------|------------------------------------|---------------------|---------------------|--------|
| Oral (stomach tube) | NOAEL | OECD 408 | > 1000 mg/kg bw/day | No effect | 90 day(s) | Rat (male / female) | Experimental value | |
| Dermal | | | | | | | Data waiving | |
| Inhalation (aerosol) | NOAEC | Subchronic toxicity test | 2.1 mg/m ³ air | No effect | 13 weeks (6h / day, 5 days / week) | Rat (female) | Experimental value | |

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

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Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement is based on the relevant ingredients

antimony-nickel-titanium-oxide-yellow

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|------------------------|--|-----------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 473 | Chinese hamster lung fibroblasts (V79) | No effect | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 476 | Mouse (lymphoma L5178Y cells) | No effect | Experimental value | |

chromium (III) oxide

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|----------|-----------------------------|-----------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Bacteria (S.typhimurium) | No effect | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | OECD 476 | Chinese hamster ovary (CHO) | No effect | Experimental value | |

calcium fluoride

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|----------|--|-----------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 476 | Chinese hamster lung fibroblasts (V79) | No effect | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Bacteria (S.typhimurium) | No effect | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | OECD 473 | Chinese hamster lung fibroblasts (V79) | No effect | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|----------|-----------------------------|--------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 473 | Chinese hamster ovary (CHO) | | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Bacteria (S.typhimurium) | | Experimental value | |

Mutagenicity (in vivo)

Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement is based on the relevant ingredients

chromium (III) oxide

| Result | Method | Exposure time | Test substrate | Organ/Effect | Value determination | Remark |
|----------------------------|----------|---------------|-----------------------|-------------------------|---------------------|----------------------------------|
| Negative (Intraperitoneal) | OECD 474 | | Mouse (male / female) | Bone marrow (no effect) | Experimental value | Single intraperitoneal injection |

calcium fluoride

| Result | Method | Exposure time | Test substrate | Organ/Effect | Value determination | Remark |
|----------------------------------|--------|---------------|-----------------------|--------------|---------------------|--------|
| Negative (Oral (drinking water)) | | 6 week(s) | Mouse (male / female) | No effect | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| Result | Method | Exposure time | Test substrate | Organ/Effect | Value determination | Remark |
|--------------------------------|----------|---------------|-----------------------|--------------|---------------------|------------------|
| Negative (Oral (stomach tube)) | OECD 474 | | Mouse (male / female) | No effect | Experimental value | Single treatment |

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

Poxy Color Green RAL6024

No (test)data on the mixture available

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Poxy Color Green RAL6024

Judgement is based on the relevant ingredients

The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.

chromium (III) oxide

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|------------------------|-------|------------------------|-------------------|---------------------|---------------------|------------------|
| Oral (diet) | | Equivalent to OECD 451 | | No carcinogenic effect | 105 weeks (daily) | Rat (male / female) | Experimental value | Not quantifiable |

calcium fluoride

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|-----------------------|-----------|--------|---------|------------------------|-------------------|--------------|---------------------|--------|
| Oral (drinking water) | NOAEL | NTP | 25 ppm | No carcinogenic effect | 103 weeks (daily) | Rat (male) | QSAR | |
| Oral (drinking water) | NOAEL | NTP | 175 ppm | No carcinogenic effect | 103 weeks (daily) | Rat (female) | QSAR | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

| Route of exposure | Parameter | Method | Value | Organ/Effect | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|-----------------------------|-------------------|------------------------|---------------------------|---------------------|---------------------|--------|
| Inhalation (dust) | | | category 2 | | | | Annex VI | |
| Oral (diet) | NOEL | Carcinogenic toxicity study | 2500 mg/kg bw/day | No carcinogenic effect | 103 weeks (7 days / week) | Rat (male / female) | Experimental value | |

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

Poxy Color Green RAL6024

No (test) data on the mixture available

Judgement is based on the relevant ingredients

antimony-nickel-titanium-oxide-yellow

| Category | Parameter | Method | Value | Exposure time | Species | Effect | Value determination | Remark |
|--|-----------|------------------------|--------------------------|---|---------------------|-----------|---------------------|--------|
| Developmental toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 1000 mg/kg bw/day | 14 days (gestation, daily) | Rat | No effect | Experimental value | |
| Maternal toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 1000 mg/kg bw/day | 14 days (gestation, daily) | Rat | No effect | Experimental value | |
| Effects on fertility (Oral (stomach tube)) | NOAEL | Equivalent to OECD 422 | ≥ 1000 mg/kg bw/day | 42 days (1x / day) - 46 days (1x / day) | Rat (male / female) | No effect | Experimental value | |

chromium (III) oxide

| Category | Parameter | Method | Value | Exposure time | Species | Effect | Value determination | Remark |
|--------------------------------------|------------|------------------------|-------------------|----------------------------|---------------------|-----------|---------------------|------------------|
| Developmental toxicity (Oral (diet)) | Dose level | Equivalent to OECD 414 | 5.86 mg/kg bw/day | 20 days (gestation, daily) | Rat | No effect | Experimental value | |
| Maternal toxicity (Oral (diet)) | Dose level | Equivalent to OECD 414 | 5.86 mg/kg bw/day | 20 days (gestation, daily) | Rat | No effect | Experimental value | |
| Effects on fertility (Oral (diet)) | | Equivalent to OECD 416 | | | Rat (male / female) | No effect | Experimental value | Not quantifiable |

calcium fluoride

| Category | Parameter | Method | Value | Exposure time | Species | Effect | Value determination | Remark |
|--|-----------|------------------------|---------|----------------------------|---------------------|--------------------|---------------------|--------|
| Developmental toxicity (Oral (drinking water)) | NOAEL | Equivalent to OECD 414 | 250 ppm | 20 days (gestation, daily) | Rat | Foetus (no effect) | Experimental value | |
| Maternal toxicity (Oral (drinking water)) | NOAEL | Equivalent to OECD 414 | 175 ppm | 20 days (gestation, daily) | Rat | No effect | Experimental value | |
| Effects on fertility (Oral (drinking water)) | NOAEL | Equivalent to OECD 416 | 250 ppm | 10 weeks (daily) | Rat (male / female) | No effect | Experimental value | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

| Category | Parameter | Method | Value | Exposure time | Species | Effect | Value determination | Remark |
|--|-----------|----------|--------------------------|-------------------------|---------------------|-----------|---------------------|--------|
| Developmental toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 1000 mg/kg bw/day | 2 weeks (7 days / week) | Rat | No effect | Experimental value | |
| Maternal toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 1000 mg/kg bw/day | 2 weeks (7 days / week) | Rat | No effect | Experimental value | |
| Effects on fertility (Oral (diet)) | NOAEL | OECD 443 | ≥ 1000 mg/kg bw/day | 14 day(s) | Rat (male / female) | No effect | Experimental value | |

Conclusion

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Not classified for reprotoxic or developmental toxicity

Poxy Color Green RAL6024

Toxicity other effects

Poxy Color Green RAL6024

No (test)data on the mixture available

Chronic effects from short and long-term exposure

Poxy Color Green RAL6024

Respiratory difficulties.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Poxy Color Green RAL6024

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

antimony-nickel-titanium-oxide-yellow

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|---------------|--------------|------------|-------------------------|--------------------|------------------|---|
| Acute toxicity fishes | LC50 | DIN 38412-15 | > 10000 mg/l | 48 h | Leuciscus idus | Static system | Fresh water | Experimental value; Nominal concentration |
| Acute toxicity crustacea | EC50 | EU Method C.2 | > 100 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; Nominal concentration |
| Toxicity algae and other aquatic plants | EC50 | OECD 201 | > 100 mg/l | 72 h | Desmodesmus subspicatus | Static system | Fresh water | Experimental value; GLP |
| Long-term toxicity aquatic crustacea | NOEC | OECD 211 | > 1 mg/l | 21 day(s) | Daphnia magna | Semi-static system | Fresh water | Experimental value; GLP |
| Toxicity aquatic micro-organisms | EC50 | DIN 38412-27 | > 10000 mg/l | 30 minutes | Pseudomonas putida | Static system | Fresh water | Experimental value; Nominal concentration |

chromium (III) oxide

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|--------------------------------------|-----------|------------------------|--------------|-----------|---------------|--------------------|------------------|--------------------------------------|
| Acute toxicity fishes | LC50 | ISO 7346-1 | > 10000 mg/l | 96 h | Danio rerio | Static system | Fresh water | Experimental value; GLP |
| Acute toxicity crustacea | EC50 | OECD 202 | 14 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; Locomotor effect |
| Long-term toxicity fish | NOEC | OECD 210 | ≥ 1000 mg/l | 30 day(s) | Danio rerio | Semi-static system | Fresh water | Read-across; GLP |
| Long-term toxicity aquatic crustacea | NOEC | Equivalent to OECD 211 | 3.4 mg/l | 21 day(s) | Daphnia magna | Semi-static system | Fresh water | Experimental value; Reproduction |

calcium fluoride

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|------------------|-----------------------|-----------|---------------------------------|--------------------|------------------|----------------------------------|
| Acute toxicity fishes | LC50 | EPA 600/3-75/009 | 107.5 ppm | 96 h | Oncorhynchus mykiss | Static system | Fresh water | Read-across; Lethal |
| Acute toxicity crustacea | LC50 | | 8.1 mg/l - 32.9 mg/l | 96 h | Hyalella azteca | Static system | | Experimental value; Lethal |
| Toxicity algae and other aquatic plants | IC50 | | 273 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| Long-term toxicity fish | LC50 | | 11.2 mg/l - 40.9 mg/l | 7 day(s) | Oncorhynchus mykiss | Semi-static system | Fresh water | Experimental value; Lethal |
| Long-term toxicity aquatic crustacea | NOEC | | 3.7 mg/l | 21 day(s) | Daphnia magna | Static system | Fresh water | Experimental value; Reproduction |
| Toxicity aquatic micro-organisms | NOEC | | 231 mg/l | 16 h | Pseudomonas putida | Static system | Fresh water | Experimental value; Growth |
| | NOEC | | 510 mg/l | 3 h | Activated sludge | Static system | Fresh water | Experimental value; Respiration |

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titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|------------------------|-------------|-----------|---------------------------------|--------------------|------------------|---|
| Acute toxicity fishes | LC50 | | > 1000 mg/l | | Pisces | | Fresh water | Literature study |
| Acute toxicity crustacea | EC50 | | > 1000 mg/l | | Invertebrata | | Fresh water | Literature study |
| Toxicity algae and other aquatic plants | EC50 | OECD 201 | > 100 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| | NOEC | OECD 201 | ≥ 100 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| Long-term toxicity fish | NOEC | Equivalent to OECD 212 | ≥ 1000 mg/l | 8 day(s) | Danio rerio | Semi-static system | Fresh water | Experimental value; Nominal concentration |
| Long-term toxicity aquatic crustacea | NOEC | OECD 211 | ≥ 5 mg/l | 21 day(s) | Daphnia magna | Semi-static system | Fresh water | Weight of evidence; Reproduction |
| Toxicity aquatic micro-organisms | NOEC | OECD 209 | ≥ 1000 mg/l | 3 h | Activated sludge | Static system | Fresh water | Experimental value; Respiration |

No classification for aquatic toxicity since the toxicity limits are above the water solubility

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Water

No test data of component(s) available

12.3. Bioaccumulative potential

Poxy Color Green RAL6024

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------------------------|-------|-------------|---------------------|
| | Not applicable (mixture) | | | |

antimony-nickel-titanium-oxide-yellow

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|----------------------------|-------|-------------|---------------------|
| | Not applicable (inorganic) | | | |

chromium (III) oxide

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|----------------------------|-------|-------------|---------------------|
| | Not applicable (inorganic) | | | |

calcium fluoride

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|----------|-------------------|-----------|-----------------|---------------------|
| BCF | OECD 305 | 0 l/kg - 6.4 l/kg | 4 week(s) | Cyprinus carpio | Experimental value |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|----------------------------|-------|-------------|---------------------|
| | Not applicable (inorganic) | | | |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|----------------------------|-------|-------------|---------------------|
| | Not applicable (inorganic) | | | |

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

Poxy Color Green RAL6024

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

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chromium (III) oxide

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

07 03 99 (wastes from the MFSU of organic dyes and pigments (except 06 11): wastes not otherwise specified). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2. UN proper shipping name

14.3. Transport hazard class(es)

| | |
|------------------------------|--|
| Hazard identification number | |
| Class | |
| Classification code | |

14.4. Packing group

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5. Environmental hazards

| | |
|--|----|
| Environmentally hazardous substance mark | no |
|--|----|

14.6. Special precautions for user

| | |
|--------------------|--|
| Special provisions | |
| Limited quantities | |

14.7. Maritime transport in bulk according to IMO instruments

| | |
|--------------------------|----------------|
| Annex II of MARPOL 73/78 | Not applicable |
|--------------------------|----------------|

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

| VOC content | Remark |
|-------------|--------|
| 0 % | |

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

| | Designation of the substance, of the group of substances or of the mixture | Conditions of restriction |
|---------------------------------------|--|--|
| antimony-nickel-titanium-oxide-yellow | Nickel and its compounds | 1. Shall not be used: (a) in any post assemblies which are inserted into pierced ears and other pierced parts of the human body unless the rate of nickel release from such post assemblies is less than 0,2 $\mu\text{g}/\text{cm}^2/\text{week}$ (migration limit); (b) in articles intended to come into direct and prolonged contact with the skin such as: — earrings, — necklaces, bracelets and chains, anklets, finger rings, — wrist-watch cases, watch straps and tighteners, — rivet buttons, tighteners, rivets, zippers and metal marks, when these are used in garments, if the rate of nickel release from the parts of these articles coming into direct |

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and prolonged contact with the skin is greater than 0,5 µg/cm² / week.
 (c) in articles referred to in point (b) where these have a non-nickel coating unless such coating is sufficient to ensure that the rate of nickel release from those parts of such articles coming into direct and prolonged contact with the skin will not exceed 0,5 µg/cm² / week for a period of at least two years of normal use of the article.
 2. Articles which are the subject of paragraph 1 shall not be placed on the market unless they conform to the requirements set out in that paragraph.
 3. The standards adopted by the European Committee for Standardisation (CEN) shall be used as the test methods for demonstrating the conformity of articles to paragraphs 1 and 2.
 Titles and references of harmonised standards under entry 27 of Annex XVII to REACH (see Commission communication (EU) No 2017/C 011/02)

National legislation Belgium

Poxy Color Green RAL6024

No data available

antimony-nickel-titanium-oxide-yellow

| | |
|---------------------------|--|
| Additional classification | Composés du nickel, (mesurée en tant que Ni); C; La mention "C" signifie que l'agent en question relève du champ d'application de l'arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l'exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail. |
|---------------------------|--|

quartz (SiO₂)

| | |
|--|--|
| Additional classification | Silices cristallines: quartz; C; La mention "C" signifie que l'agent en question relève du champ d'application de l'arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l'exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail. |
| Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2) | silice cristalline alvéolaire; VI.2.3.; Liste non limitative de substances, mélanges et procédés visés à l'article VI.2-1, alinéa 3 |

National legislation The Netherlands

Poxy Color Green RAL6024

| | |
|----------------------|---|
| Waterbezwaarlijkheid | B (4); Algemene Beoordelingsmethodiek (ABM) |
|----------------------|---|

National legislation France

Poxy Color Green RAL6024

No data available

antimony-nickel-titanium-oxide-yellow

| | |
|--|----------------------------------|
| Catégorie cancérigène | Antimoine et ses composés, en Sb |
| | Titane (dioxyde de), en Ti; C2 |
| titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] | |
| Catégorie cancérigène | Titane (dioxyde de), en Ti; C2 |

National legislation Germany

Poxy Color Green RAL6024

| | |
|-----|--|
| WGK | 1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 |
|-----|--|

antimony-nickel-titanium-oxide-yellow

| | |
|---------------------------------------|--|
| TA-Luft | 5.2.1 |
| TRGS900 - Risiko der Fruchtschädigung | Nickel und Nickelverbindungen; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden |
| Sensibilisierende Stoffe | Nickel und Nickelverbindungen; Sh; Hautsensibilisierende Stoffe |

chromium (III) oxide

| | |
|---------|-----------|
| TA-Luft | 5.2.2/III |
|---------|-----------|

calcium fluoride

| | |
|---------------------------------------|---|
| TA-Luft | 5.2.2/III |
| TRGS900 - Risiko der Fruchtschädigung | Fluoride (als Fluor berechnet); Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden |
| Hautresorptive Stoffe | Fluoride (als Fluor berechnet); H; Hautresorptiv |

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| | |
|---------|-----------|
| TA-Luft | 5.2.2/III |
|---------|-----------|

National legislation Austria

Poxy Color Green RAL6024

No data available

Reason for revision: 3

Publication date: 2017-08-11

Date of revision: 2024-03-24

Revision number: 0200

BIG number: 58631

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Poxy Color Green RAL6024

antimony-nickel-titanium-oxide-yellow

| | |
|--|---|
| Krebserzeugend | Nickelverbindungen in Form einatembarer Tröpfchen; III A1 Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide, Nickelchromat und Nickel- carbonat) und Stäube von Nickelverbindungen und Nickellegierungen; III A1 |
| Gefahr der Sensibilisierung der Haut | Nickelverbindungen in Form einatembarer Tröpfchen; Sh Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide, Nickelchromat und Nickel- carbonat) und Stäube von Nickelverbindungen und Nickellegierungen; Sh |
| Gefahr der Sensibilisierung der Atemwege | Nickelverbindungen in Form einatembarer Tröpfchen; Sa Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide, Nickelchromat und Nickel- carbonat) und Stäube von Nickelverbindungen und Nickellegierungen; Sa |

chromium (III) oxide

| | |
|--------------------------------------|---|
| Gefahr der Sensibilisierung der Haut | Chrommetall, anorganische Chrom(II)- und anorganische Chrom(III)-Verbindungen (unlöslich); Sh |
|--------------------------------------|---|

National legislation United Kingdom

Poxy Color Green RAL6024

No data available

antimony-nickel-titanium-oxide-yellow

| | |
|-----------------|--|
| Carcinogen | Nickel, insoluble inorganic compounds (as Ni)(except nickel tetracarbonyl); Carc |
| Skin absorption | Nickel, insoluble inorganic compounds (as Ni)(except nickel tetracarbonyl); Sk |

Other relevant data

Poxy Color Green RAL6024

No data available

antimony-nickel-titanium-oxide-yellow

| | |
|------------------|--|
| TLV - Carcinogen | Nickel and inorganic compounds including Nickel subsulfide, as Ni: Insoluble inorganic compounds (NOS); A1 Titanium dioxide - nanoscale particles; A3 |
|------------------|--|

chromium (III) oxide

| | |
|-----------------------|---|
| IARC - classification | 3; Chromium (III) compounds |
| TLV - Carcinogen | Chromium, and inorganic compounds: Trivalent chromium compounds, as Cr(III); A4 |

calcium fluoride

| | |
|------------------|---------------------|
| TLV - Carcinogen | Fluorides, as F; A4 |
|------------------|---------------------|

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

| | |
|-----------------------|--|
| TLV - Carcinogen | Titanium dioxide - finescale particles; A3 Titanium dioxide - nanoscale particles; A3 |
| IARC - classification | 2B; Titanium dioxide |

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H351 Suspected of causing cancer if inhaled.

EUH210 Safety data sheet available on request.

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

| | |
|--------------|---|
| (*) | INTERNAL CLASSIFICATION BY BIG |
| ADI | Acceptable daily intake |
| AOEL | Acceptable operator exposure level |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration Factor |
| BEI | Biological Exposure Indices |
| CLP (EU-GHS) | Classification, labelling and packaging (Globally Harmonised System in Europe) |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No Effect Level |
| EC10 | Effect Concentration 10 % |
| EC50 | Effect Concentration 50 % |
| ErC50 | EC50 in terms of reduction of growth rate |
| GLP | Good Laboratory Practice |
| LC0 | Lethal Concentration 0 % |
| LC50 | Lethal Concentration 50 % |
| LD50 | Lethal Dose 50 % |
| LOAEC/LOAEL | Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level |
| NOAEC/NOAEL | No Observed Adverse Effect Concentration/No Observed Adverse Effect Level |
| NOEC/NOEL | No Observed Effect Concentration/No Observed Effect Level |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | Persistent, Bioaccumulative & Toxic |
| PNEC | Predicted No Effect Concentration |
| STP | Sludge Treatment Process |
| vPvB | very Persistent & very Bioaccumulative |

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