according to the OSHA Hazard Communication Standard



### 851G-224 TOPCOAT GREEN

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#### **SECTION 1. IDENTIFICATION**

Product name : 851G-224 TOPCOAT GREEN

Product code : D14847281

SDS-Identcode : 130000127774

Manufacturer or supplier's details

Company name of supplier : The Chemours Company FC, LLC

Address : 1007 Market Street

Wilmington, DE 19801 United States of America (USA)

Telephone : 1-844-773-CHEM (outside the U.S. 1-302-773-1000)

Emergency telephone : Medical emergency: 1-866-595-1473 (outside the U.S. 1-302-

773-2000); Transport emergency: +1-800-424-9300 (outside

the U.S. +1-703-527-3887)

Recommended use of the chemical and restrictions on use

Recommended use : Coatings

Restrictions on use : For industrial use only.

Do not use or resell Chemours<sup>™</sup> materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information,

please contact your Chemours representative.

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity

- repeated exposure

: Category 2 (Central nervous system, Auditory system)

#### **GHS** label elements

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Hazard pictograms









Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Central nervous system, Auditory system) through prolonged or repeated exposure.

Precautionary Statements

#### Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, sparks, open flame and hot surfaces. No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical, ventilating and lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe mist or vapors.

P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves, protective clothing, eye protection and face protection.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

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

P308 + P313 IF exposed or concerned: Get medical attention. P333 + P313 If skin irritation or rash occurs: Get medical attention

P363 Wash contaminated clothing before reuse.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

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#### **Additional Labeling**

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1.6594 %

#### Other hazards

The thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flulike symptoms in humans, especially when smoking contaminated tobacco.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Paint

#### Components

| Chemical name                         | CAS-No.    | Concentration (% w/w) |
|---------------------------------------|------------|-----------------------|
| Hydrocarbons, C9, aromatics           | 64742-95-6 | >= 5 - < 10           |
| Chromium oxide                        | 1308-38-9  | >= 1 - < 5            |
| Titanium dioxide                      | 13463-67-7 | >= 1 - < 5            |
| Sodium lauryl sulfate                 | 73296-89-6 | >= 1 - < 5            |
| 2,6,8-Trimethyl-4-                    | 60828-78-6 | >= 1 - < 5            |
| nonyloxypolyethyleneoxyethanol        |            |                       |
| Toluene                               | 108-88-3   | >= 1 - < 5            |
| Xylene                                | 1330-20-7  | >= 1 - < 5            |
| Ethylbenzene                          | 100-41-4   | >= 0.1 - < 1          |
| Mixture of: 5-chloro-2-methyl-4-      | 55965-84-9 | >= 0.0015 - < 0.06    |
| isothiazolin-3-one [EC no. 247-500-7] |            |                       |
| and 2-methyl-2H-isothiazol-3-one [EC  |            |                       |
| no. 220-239-6] (3:1)                  |            |                       |

Actual concentration is withheld as a trade secret

### Alternative CAS Numbers for some regions

| _ | Chemical name                                   | Alternative CAS Number(s) |
|---|---|---------------------------|
|   | Mixture of: 5-chloro-2-methyl-4-isothiazolin-3- | 2682-20-4, 26172-55-4     |
|   | one [EC no. 247-500-7] and 2-methyl-2H-         |                           |
|   | isothiazol-3-one [EC no. 220-239-6] (3:1)       |                           |

### **SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

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In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention immediately.

If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

delayed

May cause an allergic skin reaction. Causes serious eye damage.

Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod- :

ucts

Hydrogen fluoride carbonyl fluoride

potentially toxic fluorinated compounds

aerosolized particulates

Carbon oxides

Chromium compounds

Metal oxides Silicon oxides

Chlorine compounds

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment :

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

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#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine

which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Use explosion-proof electrical, ventilating and lighting equip-

ment.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe mist or vapors.

Do not swallow. Do not get in eyes.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Non-sparking tools should be used. Keep container tightly closed.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the

environment.

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Do not breathe decomposition products.

Conditions for safe storage : Keep in properly labeled containers.

Keep tightly closed.

Store in accordance with the particular national regulations.

Materials to avoid : No special restrictions on storage with other products.

Recommended storage tem: :

perature

41 - 77 °F / 5 - 25 °C

Further information on stor-

age stability

Do not freeze.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Ingredients with workplace control parameters

| Components                  | CAS-No.    | Value type<br>(Form of<br>exposure) | Control parameters / Permissible concentration | Basis     |
|-----------------------------|------------|-------------------------------------|--|-----------|
| Hydrocarbons, C9, aromatics | 64742-95-6 | TWA (Mist)                          | 5 mg/m³  | OSHA Z-1  |
|                             |            | TWA (Inhal-                         | 5 mg/m³  | ACGIH     |
|                             |            | able particu-<br>late matter)       |  |           |
|                             |            | TWA (Mist)                          | 5 mg/m³  | NIOSH REL |
|                             |            | ST (Mist)                           | 10 mg/m <sup>3</sup>                           | NIOSH REL |
| Chromium oxide              | 1308-38-9  | TWA                                 | 0.5 mg/m³<br>(chromium)                        | OSHA Z-1  |
|                             |            | TWA                                 | 0.5 mg/m³<br>(chromium)                        | NIOSH REL |
| Titanium dioxide            | 13463-67-7 | TWA (total dust)                    | 15 mg/m³                                       | OSHA Z-1  |
|                             |            | TWA (Respirable particulate matter) | 2.5 mg/m³<br>(Titanium dioxide)                | ACGIH     |
| Toluene                     | 108-88-3   | TWA                                 | 20 ppm   | ACGIH     |
|                             |            | TWA                                 | 100 ppm<br>375 mg/m <sup>3</sup>               | NIOSH REL |
|                             |            | ST                                  | 150 ppm<br>560 mg/m <sup>3</sup>               | NIOSH REL |
|                             |            | TWA                                 | 200 ppm  | OSHA Z-2  |
|                             |            | CEIL                                | 300 ppm  | OSHA Z-2  |
|                             |            | Peak                                | 500 ppm<br>(10 minutes)                        | OSHA Z-2  |
| Xylene                      | 1330-20-7  | TWA                                 | 100 ppm<br>435 mg/m³                           | OSHA Z-1  |
|                             |            | TWA                                 | 20 ppm   | ACGIH     |
| Ethylbenzene                | 100-41-4   | TWA                                 | 20 ppm   | ACGIH     |
|                             |            | TWA                                 | 100 ppm  | NIOSH REL |

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|     | 435 mg/m <sup>3</sup>            |           |
|-----|----------------------------------|-----------|
| ST  | 125 ppm<br>545 mg/m <sup>3</sup> | NIOSH REL |
| TWA | 100 ppm<br>435 mg/m³             | OSHA Z-1  |

# Occupational exposure limits of decomposition products

| Components          | CAS-No.   | Value type<br>(Form of<br>exposure) | Control parameters / Permissible concentration | Basis     |
|---------------------|-----------|-------------------------------------|--|-----------|
| Hydrogen fluoride   | 7664-39-3 | TWA                                 | 0.5 ppm<br>(Fluorine)                          | ACGIH     |
|                     |           | С                                   | 2 ppm<br>(Fluorine)                            | ACGIH     |
|                     |           | С                                   | 6 ppm<br>5 mg/m³                               | NIOSH REL |
|                     |           | TWA                                 | 3 ppm<br>2.5 mg/m <sup>3</sup>                 | NIOSH REL |
|                     |           | TWA                                 | 3 ppm  | OSHA Z-2  |
| Carbonyl difluoride | 353-50-4  | TWA                                 | 2 ppm  | ACGIH     |
|                     |           | STEL                                | 5 ppm  | ACGIH     |
|                     |           | TWA                                 | 2 ppm<br>5 mg/m³                               | NIOSH REL |
|                     |           | ST                                  | 5 ppm<br>15 mg/m³                              | NIOSH REL |
| Carbon dioxide      | 124-38-9  | TWA                                 | 5,000 ppm                                      | ACGIH     |
|                     |           | STEL                                | 30,000 ppm                                     | ACGIH     |
|                     |           | TWA                                 | 5,000 ppm<br>9,000 mg/m³                       | NIOSH REL |
|                     |           | ST                                  | 30,000 ppm<br>54,000 mg/m <sup>3</sup>         | NIOSH REL |
|                     |           | TWA                                 | 5,000 ppm<br>9,000 mg/m <sup>3</sup>           | OSHA Z-1  |
| Carbon monoxide     | 630-08-0  | TWA                                 | 25 ppm   | ACGIH     |
|                     |           | TWA                                 | 35 ppm<br>40 mg/m³                             | NIOSH REL |
|                     |           | С                                   | 200 ppm<br>229 mg/m³                           | NIOSH REL |
|                     |           | TWA                                 | 50 ppm<br>55 mg/m³                             | OSHA Z-1  |

## **Biological occupational exposure limits**

| Components | CAS-No.  | Control parameters | Biological specimen | Sam-<br>pling<br>time                      | Permissible concentration | Basis        |
|------------|----------|--------------------|---------------------|--|---------------------------|--------------|
| Toluene    | 108-88-3 | Toluene            | In blood            | Prior to<br>last shift<br>of work-<br>week | 0.02 mg/l                 | ACGIH<br>BEI |

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|              |           | Toluene  | Urine | End of<br>shift (As<br>soon as<br>possible<br>after<br>exposure<br>ceases) | 0.03 mg/l              | ACGIH<br>BEI |
|--------------|-----------|--|-------|--|------------------------|--------------|
|              |           | o-Cresol   | Urine | End of<br>shift (As<br>soon as<br>possible<br>after<br>exposure<br>ceases) | 0.3 mg/g<br>creatinine | ACGIH<br>BEI |
| Xylene       | 1330-20-7 | Methyl-<br>hippuric<br>acids                                 | Urine | End of<br>shift (As<br>soon as<br>possible<br>after<br>exposure<br>ceases) | 1.5 g/g creatinine     | ACGIH<br>BEI |
| Ethylbenzene | 100-41-4  | Sum of<br>mandelic<br>acid and<br>phenyl gly-<br>oxylic acid | Urine | End of<br>shift (As<br>soon as<br>possible<br>after<br>exposure<br>ceases) | 0.15 g/g<br>creatinine | ACGIH<br>BEI |

**Engineering measures** 

Processing may form hazardous compounds (see section

10).

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Use explosion-proof electrical, ventilating and lighting

equipment.

#### Personal protective equipment

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Material : Chemical-resistant gloves

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Remarks Choose gloves to protect hands against chemicals depending

> on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks

and at the end of workday.

Eye protection Wear the following personal protective equipment:

Chemical resistant goggles must be worn.

If splashes are likely to occur, wear:

Face-shield

Skin and body protection Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures If exposure to chemical is likely during typical use, provide

eye flushing systems and safety showers close to the wor-

king place.

When using do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the

workplace.

Wash contaminated clothing before re-use.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** liquid

Color green

Odor No data available

Odor Threshold No data available

pΗ 8.5 - 11

Melting point/freezing point No data available

Initial boiling point and boiling :  $> 212 \,^{\circ}\text{F} / > 100 \,^{\circ}\text{C}$ 

range

Flash point 118 °F / 48 °C

Method: ISO 2719

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Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Does not sustain combustion.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Density : 1.3310 g/cm<sup>3</sup>

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 32 mPa.s

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics

Particle size : Not applicable

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Vapors may form explosive mixture with air.

Hazardous decomposition products will be formed at elevated

temperatures.

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Conditions to avoid : None known.

Incompatible materials : None.

Hazardous decomposition products

Thermal decomposition : Hydrogen fluoride

Carbonyl difluoride Carbon dioxide Carbon monoxide

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

### **Components:**

Hydrocarbons, C9, aromatics:

Acute oral toxicity : LD50 (Rat, female): 3,492 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6.193 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

**Chromium oxide:** 

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

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Acute inhalation toxicity : LC50 (Rat): > 5.41 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 6.82 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : Acute toxicity estimate (Rat): > 2,000 mg/kg

Method: Expert judgment

Assessment: The substance or mixture has no acute dermal

toxicity

Sodium lauryl sulfate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Acute oral toxicity : LD50 (Rat): 3,300 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Toluene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 28.1 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Xylene:

Acute oral toxicity : LD50 (Rat): 3,523 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27.571 mg/l

Exposure time: 4 h

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Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 4,200 mg/kg

Ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 17.8 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute oral toxicity : LD50 (Rat): 64 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.171 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit): 87.12 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

#### Hydrocarbons, C9, aromatics:

Assessment : Repeated exposure may cause skin dryness or cracking.

**Chromium oxide:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Titanium dioxide:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Sodium lauryl sulfate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Remarks : Based on data from similar materials

### 2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

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Result : Skin irritation

Toluene:

Species : Rabbit

Method : Directive 67/548/EEC, Annex V, B.4.

Result : Skin irritation

Xylene:

Species : Rabbit Result : Skin irritation

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 1 to 4 hours of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

Hydrocarbons, C9, aromatics:

Species : Rabbit

Result : No eye irritation

**Chromium oxide:** 

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Titanium dioxide:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Sodium lauryl sulfate:

Species : Rabbit

Result : Irreversible effects on the eye Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Result : Irreversible effects on the eye

Toluene:

Species : Rabbit

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Result : No eye irritation

Method : OECD Test Guideline 405

Xylene:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol 3 and [EC no. 230 330 61 (2:4):

isothiazol-3-one [EC no. 220-239-6] (3:1):

Result : Irreversible effects on the eye Remarks : Based on skin corrosivity.

#### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

### Respiratory sensitization

Not classified based on available information.

#### Components:

#### Hydrocarbons, C9, aromatics:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

#### **Chromium oxide:**

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Remarks : Based on data from similar materials

#### Titanium dioxide:

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact Species : Mouse

Method : OECD Test Guideline 429

Result : negative

Routes of exposure : Inhalation

according to the OSHA Hazard Communication Standard



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Species : Mouse Result : negative

Routes of exposure : Inhalation Species : Humans Result : negative

**Sodium lauryl sulfate:** 

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Remarks : Based on data from similar materials

Toluene:

Test Type : Maximization Test Routes of exposure : Skin contact Species : Guinea pig

Method : Directive 67/548/EEC, Annex V, B.6.

Result : negative

Xylene:

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact
Species : Mouse
Result : negative

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : positive

Assessment : Probability or evidence of high skin sensitization rate in hu-

mans

Germ cell mutagenicity

Not classified based on available information.

Components:

Hydrocarbons, C9, aromatics:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Rat

Application Route: inhalation (vapor)

according to the OSHA Hazard Communication Standard



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Result: negative

Chromium oxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

Titanium dioxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Test Type: comet assay Method: OPPTS 870.5140

Result: positive

Genotoxicity in vivo : Test Type: In vivo mammalian alkaline comet assay

Species: Rat

Application Route: intratracheal Method: OECD Test Guideline 489

Result: negative

Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 475

Result: negative

Test Type: Transgenic rodent germ cell gene mutation assay

Species: Mouse

according to the OSHA Hazard Communication Standard



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Application Route: Intravenous injection Method: OECD Test Guideline 488

Result: negative

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

Sodium lauryl sulfate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

Toluene:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Rat

Application Route: Intraperitoneal injection

Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: inhalation (vapor) Method: OECD Test Guideline 478

Result: negative

Xylene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

malian cells Result: negative

according to the OSHA Hazard Communication Standard



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Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Skin contact

Result: negative

Ethylbenzene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with

mammalian liver cells in vivo

Species: Mouse

Application Route: Inhalation Method: OECD Test Guideline 486

Result: negative

#### Carcinogenicity

Not classified based on available information.

#### Components:

#### **Chromium oxide:**

Species : Rat
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

#### Titanium dioxide:

Species : Rat

Application Route : inhalation (dust/mist/fume)

Exposure time : 2 Years
Result : negative

Species : Rat
Application Route : Ingestion
Exposure time : 105 weeks
Result : negative

Species: MouseApplication Route: IngestionExposure time: 103 weeksResult: negative

Carcinogenicity - Assess- : Weight of evidence does not support classification as a car-

according to the OSHA Hazard Communication Standard



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ment cinogen

Sodium lauryl sulfate:

Species : Rat

Application Route : Ingestion

Exposure time : 2 Years

Result : negative

Remarks : Based on data from similar materials

Toluene:

Species : Rat

Application Route : inhalation (vapor)
Exposure time : 103 weeks
Result : negative

Species: MouseApplication Route: Skin contactExposure time: 24 MonthsResult: negative

Xylene:

Species : Rat
Application Route : Ingestion
Exposure time : 103 weeks
Result : negative

Ethylbenzene:

Species : Rat

Application Route : inhalation (vapor)
Exposure time : 104 weeks
Result : positive

Remarks : The mechanism or mode of action may not be relevant in hu-

mans.

IARC Group 2B: Possibly carcinogenic to humans

Titanium dioxide 13463-67-7

Group 2B: Possibly carcinogenic to humans

Ethylbenzene 100-41-4

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Suspected of damaging the unborn child.

**Components:** 

Hydrocarbons, C9, aromatics:

according to the OSHA Hazard Communication Standard



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Effects on fertility : Test Type: Three-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Mouse

Application Route: inhalation (vapor)

Result: negative

**Chromium oxide:** 

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

Titanium dioxide:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 443

Result: negative

Effects on fetal development: Test Type: Prenatal development toxicity study (teratogenicity)

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

Sodium lauryl sulfate:

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

Toluene:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor) Method: OECD Test Guideline 416

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: positive

according to the OSHA Hazard Communication Standard



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Reproductive toxicity - As-

sessment

: Some evidence of adverse effects on development, based on

animal experiments.

Xylene:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Ethylbenzene:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor) Method: OECD Test Guideline 416

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Inhalation Method: OECD Test Guideline 414

Result: negative

STOT-single exposure

Not classified based on available information.

**Components:** 

Hydrocarbons, C9, aromatics:

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

Titanium dioxide:

Routes of exposure : Skin contact

Assessment : No significant health effects observed in animals at concentra-

tions of 2000 mg/kg bw or less

Routes of exposure : Ingestion

Assessment : No significant health effects observed in animals at concentra-

tions of 2000 mg/kg bw or less

Routes of exposure : inhalation (dust/mist/fume)

Assessment : No significant health effects observed in animals at concentra-

tions of 5.0 mg/l/4h or less

according to the OSHA Hazard Communication Standard



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**Toluene:** 

Assessment : May cause drowsiness or dizziness.

Xylene:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (Central nervous system, Auditory system) through prolonged or

repeated exposure.

Components:

Titanium dioxide:

Routes of exposure : Ingestion

Assessment : No significant health effects observed in animals at concentra-

tions of 100 mg/kg bw or less.

Routes of exposure : inhalation (dust/mist/fume)

Assessment : No significant health effects observed in animals at concentra-

tions of 0.2 mg/l/6h/d or less.

Routes of exposure : Ingestion

Assessment : No significant health effects observed in animals at concentra-

tions of 200 mg/kg bw or less.

Toluene:

Routes of exposure : Inhalation

Target Organs : Central nervous system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Xylene:

Routes of exposure : inhalation (vapor)
Target Organs : Auditory system

Assessment : Shown to produce significant health effects in animals at con-

centrations of >0.2 to 1 mg/l/6h/d.

Ethylbenzene:

Routes of exposure : inhalation (vapor)
Target Organs : Auditory system

Assessment : Shown to produce significant health effects in animals at con-

centrations of >0.2 to 1 mg/l/6h/d.

Repeated dose toxicity

Components:

Hydrocarbons, C9, aromatics:

Species : Rat, female NOAEL : 900 mg/m³

according to the OSHA Hazard Communication Standard



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Application Route : inhalation (vapor)

Exposure time : 12 Months

Remarks : Based on data from similar materials

**Chromium oxide:** 

Species : Rat

NOAEL : 2,000 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Titanium dioxide:

Species : Rat, male and female

NOAEL : 24,000 mg/kg
LOAEL : > 24,000 mg/kg
Application Route : Ingestion

Exposure time : 28 Days

Method : OECD Test Guideline 407

Remarks : No significant adverse effects were reported

Species : Rat, male and female

NOAEL : 0.01 mg/l LOAEL : 0.5 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 24 Months

Method : OECD Test Guideline 453

Remarks : No significant adverse effects were reported

Species : Rat, male and female

NOAEL : 962 mg/kg
LOAEL : > 962 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Method : OECD Test Guideline 408

Remarks : No significant adverse effects were reported

**Sodium lauryl sulfate:** 

Species : Rat

NOAEL : > 430 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Remarks : Based on data from similar materials

Toluene:

Species : Rat
LOAEL : 1.875 mg/l
Application Route : inhalation (vapor)

Exposure time : 6 Months

Species : Rat

NOAEL : 625 mg/kg

Application Route : Ingestion

according to the OSHA Hazard Communication Standard



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Exposure time : 13 Weeks

Xylene:

Species : Rat

LOAEL : > 0.2 - 1 mg/l
Application Route : inhalation (vapor)

Exposure time : 13 Weeks

Remarks : Based on data from similar materials

Species : Rat

LOAEL : 150 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Ethylbenzene:

Species : Rat LOAEL : 0.868 mg/l

Application Route : inhalation (vapor)

Exposure time : 13 Weeks

Species: RatNOAEL: 75 mg/kgLOAEL: 250 mg/kgApplication Route: Ingestion

Method : OECD Test Guideline 408

#### **Aspiration toxicity**

Not classified based on available information.

#### **Components:**

### Hydrocarbons, C9, aromatics:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### Titanium dioxide:

No aspiration toxicity classification

#### Toluene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### Xylene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

### Ethylbenzene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

according to the OSHA Hazard Communication Standard



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#### **Experience with human exposure**

### **Components:**

Toluene:

Inhalation : Target Organs: Central nervous system

Symptoms: Neurological disorders

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

#### **Components:**

### Hydrocarbons, C9, aromatics:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 3.2 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 7.9

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.22

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 99 mg/l

Exposure time: 10 min

### **Chromium oxide:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10,000 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 848.6

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC (Danio rerio (zebra fish)): 1,000 mg/l

Exposure time: 30 d

according to the OSHA Hazard Communication Standard



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Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): > 0.02 mg/l Exposure time: 21 d

Remarks: No toxicity at the limit of solubility.

Toxicity to microorganisms : EC50: > 10,000 mg/l

Exposure time: 3 h

Titanium dioxide:

Toxicity to fish : LC50 (Fish): > 1,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

LC50 (Marine species): > 10,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia sp. (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

EC50 (No species specified): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

EC50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l

Exposure time: 72 h Method: ISO 10253

NOEC (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 3 d

Method: OECD Test Guideline 201

NOEC (Skeletonema costatum (marine diatom)): 5,600 mg/l

Exposure time: 3 d Method: ISO 10253

Sodium lauryl sulfate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 4.7 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

according to the OSHA Hazard Communication Standard



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Toxicity to algae/aquatic EC50 (Desmodesmus subspicatus (green algae)): > 20 mg/l

plants Exposure time: 72 h

Remarks: Based on data from similar materials

EC10 (Desmodesmus subspicatus (green algae)): 5.4 mg/l

Exposure time: 72 h

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.11 mg/l

Exposure time: 34 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.14 mg/l

Exposure time: 21 d

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC10 (Pseudomonas putida): 1,083.85 mg/l

> Exposure time: 16 h Method: DIN 38 412 Part 8

Remarks: Based on data from similar materials

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 39 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 81.2 mg/l

Exposure time: 48 h

Toluene:

Toxicity to fish LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: NOEC (Skeletonema costatum (marine diatom)): 10 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l

Exposure time: 40 d

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Ceriodaphnia dubia (water flea)): 0.74 mg/l

Exposure time: 7 d

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 84 mg/l

Exposure time: 24 h

Xylene:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 13.5 mg/l

Exposure time: 96 h

according to the OSHA Hazard Communication Standard



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Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): 10 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Danio rerio (zebra fish)): > 0.1 - < 1 mg/l

Exposure time: 35 d

Method: OECD Test Guideline 210

Remarks: Based on data from similar materials

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

EL10 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC: > 100 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Ethylbenzene:

: LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l Toxicity to fish

Exposure time: 96 h

Method: OECD Test Guideline 203

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1.8 - 2.4 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: EC50 (Pseudokirchneriella subcapitata (green algae)): 3.6

Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 3.4

ma/l

Exposure time: 96 h

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Ceriodaphnia dubia (water flea)): 0.96 mg/l

Exposure time: 7 d

Toxicity to microorganisms EC50 (Nitrosomonas sp.): 96 mg/l

Exposure time: 24 h

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l

Exposure time: 96 h

according to the OSHA Hazard Communication Standard



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Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.16 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Skeletonema costatum (marine diatom)): 0.0052 mg/l

Exposure time: 48 h

NOEC (Skeletonema costatum (marine diatom)): 0.00049 mg/l

Exposure time: 48 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.02 mg/l

Exposure time: 36 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.10 mg/l

Exposure time: 21 d

## Persistence and degradability

#### **Components:**

#### Hydrocarbons, C9, aromatics:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 78 % Exposure time: 28 d

Method: OECD Test Guideline 301F

**Sodium lauryl sulfate:** 

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 % Exposure time: 28 d

Method: OECD Test Guideline 301B

#### 2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Biodegradability : Result: Not readily biodegradable.

Toluene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 80 % Exposure time: 20 d

Xylene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: > 70 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Ethylbenzene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 %

according to the OSHA Hazard Communication Standard



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Exposure time: 28 d

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradability Result: Not readily biodegradable.

> Biodegradation: 62 % Exposure time: 28 d

Method: OECD Test Guideline 301B

Bioaccumulative potential

**Components:** 

Hydrocarbons, C9, aromatics:

Partition coefficient: n-

log Pow: 3.7 - 4.5

octanol/water

Chromium oxide:

Bioaccumulation Species: Fish

Bioconcentration factor (BCF): 260 - 800

Titanium dioxide:

Bioaccumulation Species: Oncorhynchus mykiss (rainbow trout)

Bioconcentration factor (BCF): 352

Sodium lauryl sulfate:

Partition coefficient: n-

: log Pow: <= -2.1

octanol/water

**Toluene:** 

Bioaccumulation Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 90

Partition coefficient: n-

octanol/water

: log Pow: 2.73

Xylene:

Partition coefficient: n-: log Pow: 3.16

octanol/water Remarks: Calculation

**Ethylbenzene:** 

Partition coefficient: n-

log Pow: 3.6

octanol/water

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1):

Partition coefficient: n-: log Pow: < 1

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octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

#### **UNRTDG**

Not regulated as a dangerous good

#### **IATA-DGR**

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

(Xylene)

Class : 9 Packing group : III

Labels : CLASS 9
ERG Code : 171
Marine pollutant : no

Remarks : THE ABOVE INFORMATION ONLY APPLIES TO PACKAGE

SIZES WHERE THE HAZARDOUS SUBSTANCE MEETS

THE REPORTABLE QUANTITY.

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data

according to the OSHA Hazard Communication Standard



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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### **CERCLA Reportable Quantity**

| Components | CAS-No.   | Component RQ | Calculated product RQ |
|------------|-----------|--------------|-----------------------|
|            |           | (lbs)        | (lbs)                 |
| Xylene     | 1330-20-7 | 100          | 8325                  |
| Toluene    | 108-88-3  | 1000         | 58129                 |

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Respiratory or skin sensitization

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Serious eye damage or eye irritation

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

Chromium oxide 1308-38-9 >= 1 - < 5 % Toluene 108-88-3 >= 1 - < 5 % >= 1 - < 5 % **Xylene** 1330-20-7 >= 0.1 - < 1 % Ethylbenzene 100-41-4 Lead 7439-92-1 < 0.1 % Mercury 7439-97-6 < 0.1 %

Volatile organic compounds (VOC) content

VOC content: 262.91 g/l Remarks: less exempt

VOC content: 118.03 g/l Remarks: as packaged

### **US State Regulations**

### Pennsylvania Right To Know

Water 7732-18-5
Fluoropolymer Trade secret
Hydrocarbons, C9, aromatics 64742-95-6
Chromium oxide 1308-38-9

according to the OSHA Hazard Communication Standard



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|-----------------|---|------------------------------|---|
|                 | Titanium dioxide<br>Toluene<br>Xylene<br>Ethylbenzene<br>Butan-1-ol |                              | 13463-67-7<br>108-88-3<br>1330-20-7<br>100-41-4<br>71-36-3        |
|                 | Aluminum oxide<br>Ammonium hydrox                                   | iide                         | 1344-28-1<br>1336-21-6  |

#### California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide, which is/are known to the State of California to cause cancer, and

Toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### **California List of Hazardous Substances**

| Hydrocarbons, C9, aromatics | 64742-95-6 |
|-----------------------------|------------|
| Chromium oxide              | 1308-38-9  |
| Toluene                     | 108-88-3   |
| Xylene                      | 1330-20-7  |

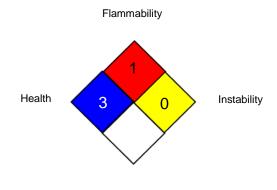
#### **California Permissible Exposure Limits for Chemical Contaminants**

| Hydrocarbons, C9, aromatics | 64742-95-6 |
|-----------------------------|------------|
| Chromium oxide              | 1308-38-9  |
| Titanium dioxide            | 13463-67-7 |
| Toluene                     | 108-88-3   |
| Xylene                      | 1330-20-7  |

#### **SECTION 16. OTHER INFORMATION**

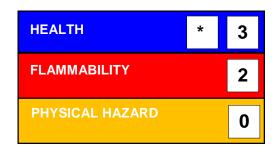
#### **Further information**

#### NFPA 704:



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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For further information contact the local Chemours office or nominated distributors.

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#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-2 : USA. Occupational Exposure Limits (OSHA) - Table Z-2

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

ACGIH / C : Ceiling limit

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

NIOSH REL / C : Ceiling value not be exceeded at any time.

OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-2 / TWA : 8-hour time weighted average OSHA Z-2 / CEIL : Acceptable ceiling concentration

OSHA Z-2 / Peak : Acceptable maximum peak above the acceptable ceiling con-

centration for an 8-hr shift

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act

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(United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety

**Data Sheet** 

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

**Revision Date** 05/03/2024

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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