

# SAFETY DATA SHEET



## VC-50

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 25.06.2024  |
| 11.0    | 22.08.2024     | 1328342-00047 | Date of first issue: 27.02.2017 |

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

#### 1.1 Product identifier

|                           |   |  |
|---------------------------|---|--|
| Trade name                | : | VC-50  |
| SDS-Identcode             | : | 130000001245   |
| REACH Registration Number | : | 01-2120763412-59-0000  |
| Substance name            | : | Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltri-phenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1) |

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

|                                 |   |  |
|---------------------------------|---|--|
| Use of the Substance/Mixture    | : | Processing aid, Curing chemical  |
| Recommended restrictions on use | : | For industrial use only.<br>Do not use or resell Chemours™ 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. |

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

|  |   |  |
|--|---|--|
| Company  | : | Chemours Netherlands B.V.<br>Baanhoekweg 22<br>3313 LA Dordrecht Netherlands |
| Telephone  | : | +31-(0)-78-630-1011  |
| Telefax  | : | +31-78-6163737   |
| E-mail address of person responsible for the SDS | : | sds-support@chemours.com   |

#### 1.4 Emergency telephone number

0-800-983-611 (Toll free in-country) or +(44)-870-8200418

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

|                                    |   |
|------------------------------------|---|
| Reproductive toxicity, Category 1B | H360: May damage fertility or the unborn child. |
|------------------------------------|---|

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Specific target organ toxicity - repeated exposure, Category 2, Seminal vesicle, Prostate

H373: May cause damage to organs through prolonged or repeated exposure.

Short-term (acute) aquatic hazard, Category 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Category 1

H410: Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

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

Hazard pictograms :



Signal word : Danger

Hazard statements :  
H360 May damage fertility or the unborn child.  
H373 May cause damage to organs (Seminal vesicle, Prostate) through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :  
**Prevention:**  
P201 Obtain special instructions before use.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### **Response:**

P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P391 Collect spillage.

#### **Storage:**

P405 Store locked up.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name : Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

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### Components

| Chemical name   | CAS-No.<br>EC-No. | Concentration (% w/w) |
|---|-------------------|-----------------------|
| Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1) | Not Assigned      | $\geq 90 - \leq 100$  |
| 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol   | 131306-85-9       | $\geq 0,25 - < 0,3$   |

### Alternative CAS Numbers for some regions

| Chemical name   | Alternative CAS Number(s) |
|---|---------------------------|
| Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1) | 75768-65-9, 1478-61-1     |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.
- 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).
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with soap and 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 | : | Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.  |
| If swallowed           | : | If swallowed, DO NOT induce vomiting.<br>Get medical attention.<br>Rinse mouth thoroughly with water. |

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

|       |   |   |
|-------|---|---|
| Risks | : | May damage fertility or the unborn child.<br>May cause damage to organs through prolonged or repeated exposure. |
|-------|---|---|

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

|           |   |   |
|-----------|---|---|
| Treatment | : | Treat symptomatically and supportively. |
|-----------|---|---|

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

|                              |   |   |
|------------------------------|---|---|
| Suitable extinguishing media | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO2)<br>Dry chemical |
|------------------------------|---|---|

|                                |   |             |
|--------------------------------|---|-------------|
| Unsuitable extinguishing media | : | None known. |
|--------------------------------|---|-------------|

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

|                                       |   |  |
|---------------------------------------|---|--|
| Specific hazards during fire-fighting | : | Exposure to combustion products may be a hazard to health. |
| Hazardous combustion products         | : | Metal oxides<br>Chlorine compounds                         |

### 5.3 Advice for firefighters

|   |   |   |
|---|---|---|
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment.  |
| Specific extinguishing methods                | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |

## SECTION 6: Accidental release measures

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

|                      |   |   |
|----------------------|---|---|
| Personal precautions | : | Use personal protective equipment.<br>Follow safe handling advice (see section 7) and personal pro- |
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ective equipment recommendations (see section 8).

## 6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.  
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.

## 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe dust, fume, gas, mist, vapours or spray.  
Do not swallow.  
Avoid contact with eyes.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Keep container tightly closed.  
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national regulations.

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Advice on common storage : Do not store with the following product types:  
Self-reactive substances and mixtures  
Organic peroxides  
Explosives

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

| Substance name  | End Use   | Exposure routes | Potential health effects   | Value               |
|---|-----------|-----------------|----------------------------|---------------------|
| Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1) | Workers   | Inhalation      | Long-term systemic effects | 0,118 mg/m3         |
|   | Workers   | Skin contact    | Long-term systemic effects | 0,033 mg/kg bw/day  |
| Sodium chloride   | Workers   | Inhalation      | Long-term systemic effects | 2068,62 mg/m3       |
|   | Workers   | Inhalation      | Acute systemic effects     | 2068,62 mg/m3       |
|   | Workers   | Skin contact    | Long-term systemic effects | 295,52 mg/kg bw/day |
|   | Workers   | Skin contact    | Acute systemic effects     | 295,52 mg/kg bw/day |
|   | Consumers | Inhalation      | Long-term systemic effects | 443,28 mg/m3        |
|   | Consumers | Inhalation      | Acute systemic effects     | 443,28 mg/m3        |
|   | Consumers | Skin contact    | Long-term systemic effects | 126,65 mg/kg bw/day |
|   | Consumers | Skin contact    | Acute systemic effects     | 126,65 mg/kg bw/day |
|   | Consumers | Ingestion       | Long-term systemic         | 126,65 mg/kg        |

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|  |           |           |                        |                     |
|--|-----------|-----------|------------------------|---------------------|
|  |           |           | effects                | bw/day              |
|  | Consumers | Ingestion | Acute systemic effects | 126,65 mg/kg bw/day |

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

| Substance name  | Environmental Compartment | Value                         |
|---|---------------------------|-------------------------------|
| Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1) | Freshwater - intermittent | 0,0045 mg/l                   |
|   | Marine sediment           | 0,033 mg/kg dry weight (d.w.) |
|   | Fresh water sediment      | 0,328 mg/kg dry weight (d.w.) |
|   | Sewage treatment plant    | 10 mg/l                       |
|   | Soil                      | 0,065 mg/kg dry weight (d.w.) |
|   | Fresh water               | 0,00045 mg/l                  |
|   | Marine water              | 0,000045 mg/l                 |
| Sodium chloride   | Fresh water               | 5 mg/l                        |
|   | Sewage treatment plant    | 500 mg/l                      |
|   | Soil                      | 4,86 mg/kg dry weight (d.w.)  |

## 8.2 Exposure controls

### Engineering measures

Minimize workplace exposure concentrations.  
If sufficient ventilation is unavailable, use with local exhaust ventilation.

### Personal protective equipment

Eye/face protection : Wear the following personal protective equipment:  
Safety glasses

Hand protection  
Material : Nitrile rubber  
Glove thickness : 0,38 mm

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. 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. Breakthrough time is not determined for the product. Change gloves often!

Skin and body protection : Select appropriate protective clothing based on chemical re-

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sistance data and an assessment of the local exposure potential.

Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Particulates type (P)

### SECTION 9: Physical and chemical properties

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

|  |                          |
|--|--------------------------|
| Appearance                                       | : pellets                |
| Colour   | : pink, dark violet      |
| Odour  | : odourless              |
| Odour Threshold                                  | : No data available      |
| pH   | : No data available      |
| Melting point/freezing point                     | : No data available      |
| Initial boiling point and boiling range          | : No data available      |
| Flash point                                      | : Not applicable         |
| Evaporation rate                                 | : Not applicable         |
| Flammability (solid, gas)                        | : No data available      |
| Upper explosion limit / Upper flammability limit | : No data available      |
| Lower explosion limit / Lower flammability limit | : No data available      |
| Vapour pressure                                  | : Not applicable         |
| Relative vapour density                          | : Not applicable         |
| Density  | : 1,38 g/cm <sup>3</sup> |
| Solubility(ies)<br>Water solubility              | : slightly soluble       |
| Partition coefficient: n-octanol/water           | : Not applicable         |



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|                           |   |  |
|---------------------------|---|--|
| Auto-ignition temperature | : | No data available  |
| Decomposition temperature | : | No data available  |
| Viscosity                 |   |  |
| Viscosity, kinematic      | : | Not applicable   |
| Explosive properties      | : | Not explosive  |
| Oxidizing properties      | : | The substance or mixture is not classified as oxidizing. |

### 9.2 Other information

|               |   |                   |
|---------------|---|-------------------|
| Particle size | : | No data available |
|---------------|---|-------------------|

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Not classified as a reactivity hazard.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

|                     |   |             |
|---------------------|---|-------------|
| Hazardous reactions | : | None known. |
|---------------------|---|-------------|

### 10.4 Conditions to avoid

|                     |   |             |
|---------------------|---|-------------|
| Conditions to avoid | : | None known. |
|---------------------|---|-------------|

### 10.5 Incompatible materials

|                    |   |       |
|--------------------|---|-------|
| Materials to avoid | : | None. |
|--------------------|---|-------|

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

|  |   |  |
|--|---|--|
| Information on likely routes of exposure | : | Skin contact<br>Ingestion<br>Eye contact |
|--|---|--|

#### Acute toxicity

Not classified based on available information.

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### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                     |   |   |
|---------------------|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 2.000 mg/kg<br>Method: OECD Test Guideline 425<br>Assessment: The substance or mixture has no acute oral toxicity |
|---------------------|---|---|

### **2.4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|                       |   |   |
|-----------------------|---|---|
| Acute oral toxicity   | : | LD50 (Rat): > 2.000 mg/kg<br>Remarks: Based on data from similar materials                                    |
| Acute dermal toxicity | : | LD50 (Rat): > 2.000 mg/kg<br>Method: OECD Test Guideline 402<br>Remarks: Based on data from similar materials |

### **Skin corrosion/irritation**

Not classified based on available information.

### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|         |   |                         |
|---------|---|-------------------------|
| Species | : | Not tested on animals   |
| Method  | : | OECD Test Guideline 439 |
| Result  | : | No skin irritation      |

### **2.4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|         |   |                                      |
|---------|---|--------------------------------------|
| Species | : | Rabbit                               |
| Method  | : | OECD Test Guideline 404              |
| Result  | : | No skin irritation                   |
| Remarks | : | Based on data from similar materials |

### **Serious eye damage/eye irritation**

Not classified based on available information.

### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|         |   |                   |
|---------|---|-------------------|
| Species | : | In Vitro - Bovine |
|---------|---|-------------------|

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|        |                           |
|--------|---------------------------|
| Method | : OECD Test Guideline 437 |
| Result | : No eye irritation       |

**2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|         |  |
|---------|--|
| Species | : Rabbit                               |
| Method  | : OECD Test Guideline 405              |
| Result  | : Irreversible effects on the eye      |
| Remarks | : Based on data from similar materials |

**Respiratory or skin sensitisation****Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Components:**

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                 |  |
|-----------------|--|
| Test Type       | : Direct Peptide Reactivity Assay (DPRA) |
| Exposure routes | : Skin contact                           |
| Species         | : Not tested on animals                  |
| Method          | : OECD Test Guideline 442C               |
| Result          | : equivocal                              |

|                 |                            |
|-----------------|----------------------------|
| Test Type       | : KeratinoSens assay       |
| Exposure routes | : Skin contact             |
| Species         | : Not tested on animals    |
| Method          | : OECD Test Guideline 442D |
| Result          | : positive                 |

|                 |  |
|-----------------|--|
| Test Type       | : Maximisation Test                    |
| Exposure routes | : Skin contact                         |
| Species         | : Guinea pig                           |
| Method          | : OECD Test Guideline 406              |
| Result          | : negative                             |
| Remarks         | : Based on data from similar materials |

|            |                                      |
|------------|--------------------------------------|
| Assessment | : Does not cause skin sensitisation. |
|------------|--------------------------------------|

**2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|                 |  |
|-----------------|--|
| Test Type       | : Maximisation Test                    |
| Exposure routes | : Skin contact                         |
| Species         | : Guinea pig                           |
| Method          | : OECD Test Guideline 406              |
| Result          | : negative                             |
| Remarks         | : Based on data from similar materials |

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**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                                    |  |
|------------------------------------|--|
| Genotoxicity in vitro              | : Test Type: Bacterial reverse mutation assay (AMES)<br>Method: OECD Test Guideline 471<br>Result: negative  |
|                                    | Test Type: In vitro mammalian cell gene mutation test<br>Method: OECD Test Guideline 476<br>Result: negative |
| Germ cell mutagenicity- Assessment | : Weight of evidence does not support classification as a germ cell mutagen.                                 |

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

May damage fertility or the unborn child.

**Components:**

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                                    |  |
|------------------------------------|--|
| Effects on fertility               | : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test<br>Species: Rat<br>Application Route: Ingestion<br>Method: OECD Test Guideline 422<br>Result: positive<br>Remarks: Based on data from similar materials |
| Effects on foetal development      | : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test<br>Species: Rat<br>Application Route: Ingestion<br>Method: OECD Test Guideline 422<br>Result: negative<br>Remarks: Based on data from similar materials |
| Reproductive toxicity - Assessment | : Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments   |

**2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

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|                                    |  |
|------------------------------------|--|
| Effects on fertility               | : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test<br>Species: Rat<br>Application Route: Ingestion<br>Method: OECD Test Guideline 422<br>Result: positive<br>Remarks: Based on data from similar materials |
| Reproductive toxicity - Assessment | : Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.   |

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

May cause damage to organs (Seminal vesicle, Prostate) through prolonged or repeated exposure.

### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                 |  |
|-----------------|--|
| Exposure routes | : Ingestion  |
| Target Organs   | : Seminal vesicle, Prostate  |
| Assessment      | : Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw. |

### Repeated dose toxicity

### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                   |  |
|-------------------|--|
| Species           | : Rat, male and female                 |
| NOAEL             | : 10 mg/kg                             |
| LOAEL             | : 100 mg/kg                            |
| Application Route | : Ingestion                            |
| Exposure time     | : 28 Days                              |
| Method            | : OECD Test Guideline 407              |
| Remarks           | : Based on data from similar materials |

### Aspiration toxicity

Not classified based on available information.

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**SECTION 12: Ecological information****12.1 Toxicity****Components:**

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|   |   |   |
|---|---|---|
| Toxicity to fish                                    | : | LC50 (Pimephales promelas (fathead minnow)): 1,2 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203   |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0,79 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202  |
| Toxicity to algae/aquatic plants                    | : | ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0,45 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,0087 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| M-Factor (Acute aquatic toxicity)                   | : | 1   |
| M-Factor (Chronic aquatic toxicity)                 | : | 10  |

**2.4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|   |   |  |
|---|---|--|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l<br>Exposure time: 48 h<br>Remarks: Based on data from similar materials   |
| Toxicity to algae/aquatic plants                    | : | ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0,1 - 1 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): > 0,01 - 0,1 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials |
| Toxicity to microorganisms                          | : | EC10 (activated sludge): > 10 - 100 mg/l   |

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|  |   |
|--|---|
|  | Exposure time: 3 h<br>Method: OECD Test Guideline 209<br>Remarks: Based on data from similar materials                                |
| Toxicity to fish (Chronic toxicity)                                    | : NOEC: > 0,1 - 1 mg/l<br>Exposure time: 120 d<br>Species: Danio rerio (zebra fish)<br>Remarks: Based on data from similar materials  |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : NOEC: > 0,1 - 1 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Remarks: Based on data from similar materials |
| M-Factor (Chronic aquatic toxicity)                                    | : 1   |

### 12.2 Persistence and degradability

#### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|                  |  |
|------------------|--|
| Biodegradability | : Result: Not readily biodegradable.<br>Method: OECD Test Guideline 301B |
|------------------|--|

#### **2.4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|                  |   |
|------------------|---|
| Biodegradability | : Result: Not readily biodegradable.<br>Method: OECD Test Guideline 301B<br>Remarks: Based on data from similar materials |
|------------------|---|

### 12.3 Bioaccumulative potential

#### Components:

Reaction mass of 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and benzyltriphenylphosphonium, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)

:

|  |                 |
|--|-----------------|
| Partition coefficient: n-octanol/water | : log Pow: 2,28 |
|--|-----------------|

#### **2.4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol:**

|                 |   |
|-----------------|---|
| Bioaccumulation | : Species: Danio rerio (zebra fish)<br>Bioconcentration factor (BCF): < 500<br>Method: OECD Test Guideline 305<br>Remarks: Based on data from similar materials |
|-----------------|---|

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Partition coefficient: n-octanol/water : log Pow: < 4

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

#### **Product:**

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. 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.

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## SECTION 14: Transport information

### 14.1 UN number

ADN : UN 3077

ADR : UN 3077

RID : UN 3077

IMDG : UN 3077

IATA : UN 3077

### 14.2 UN proper shipping name



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|             |   |  |
|-------------|---|--|
| <b>ADN</b>  | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.   |
| <b>  </b>   | : | (4,4'-(Hexafluoroisopropylidene)diphenol, 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol) |
| <b>ADR</b>  | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.   |
| <b>  </b>   | : | (4,4'-(Hexafluoroisopropylidene)diphenol, 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol) |
| <b>RID</b>  | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.   |
| <b>  </b>   | : | (4,4'-(Hexafluoroisopropylidene)diphenol, 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol) |
| <b>IMDG</b> | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.   |
| <b>  </b>   | : | (4,4'-(Hexafluoroisopropylidene)diphenol, 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol) |
| <b>IATA</b> | : | Environmentally hazardous substance, solid, n.o.s.   |
| <b>  </b>   | : | (4,4'-(Hexafluoroisopropylidene)diphenol, 2,4'-Trifluoro-1-(trifluoromethyl)ethylidene diphenol) |

### 14.3 Transport hazard class(es)

|             | Class | Subsidiary risks |
|-------------|-------|------------------|
| <b>ADN</b>  | : 9   |                  |
| <b>ADR</b>  | : 9   |                  |
| <b>RID</b>  | : 9   |                  |
| <b>IMDG</b> | : 9   |                  |
| <b>IATA</b> | : 9   |                  |

### 14.4 Packing group

|                              |       |
|------------------------------|-------|
| <b>ADN</b>                   |       |
| Packing group                | : III |
| Classification Code          | : M7  |
| Hazard Identification Number | : 90  |
| Labels                       | : 9   |
| <b>ADR</b>                   |       |
| Packing group                | : III |
| Classification Code          | : M7  |
| Hazard Identification Number | : 90  |
| Labels                       | : 9   |
| Tunnel restriction code      | : (-) |
| <b>RID</b>                   |       |
| Packing group                | : III |
| Classification Code          | : M7  |
| Hazard Identification Number | : 90  |
| Labels                       | : 9   |
| <b>IMDG</b>                  |       |
| Packing group                | : III |
| Labels                       | : 9   |

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|  |   |               |
|--|---|---------------|
| EmS Code                                 | : | F-A, S-F      |
| <b>IATA (Cargo)</b>                      |   |               |
| Packing instruction (cargo aircraft)     | : | 956           |
| Packing instruction (LQ)                 | : | Y956          |
| Packing group                            | : | III           |
| Labels                                   | : | Miscellaneous |
| <b>IATA (Passenger)</b>                  |   |               |
| Packing instruction (passenger aircraft) | : | 956           |
| Packing instruction (LQ)                 | : | Y956          |
| Packing group                            | : | III           |
| Labels                                   | : | Miscellaneous |

### 14.5 Environmental hazards

|                           |       |
|---------------------------|-------|
| <b>ADN</b>                |       |
| Environmentally hazardous | : yes |
| <b>ADR</b>                |       |
| Environmentally hazardous | : yes |
| <b>RID</b>                |       |
| Environmentally hazardous | : yes |
| <b>IMDG</b>               |       |
| Marine pollutant          | : yes |
| <b>IATA (Passenger)</b>   |       |
| Environmentally hazardous | : yes |
| <b>IATA (Cargo)</b>       |       |
| Environmentally hazardous | : yes |

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

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

|         |   |   |
|---------|---|---|
| Remarks | : | Not applicable for product as supplied. |
|---------|---|---|

## SECTION 15: Regulatory information

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

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: Other information

|                   |   |   |
|-------------------|---|---|
| Other information | : | Chemours™ and the Chemours Logo are trademarks of The Chemours Company.<br>Before use read Chemours safety information. |
|-------------------|---|---|

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

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

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only

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