



## Safety Data Sheet FLUSH WC CHAIN TROPICAL 2X48G

Safety Data Sheet dated 27/4/2023, version 1

Conforms to Regulation (EC) No. 878/2020

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

#### 1.1. Product identifier

Trade name: FLUSH WC CHAIN TROPICAL 2X48G  
Trade code: 6834

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

Recommended use:

Household WC detergent

Uses advised against:

Do not use the product other than as directed by the supplier

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

Company:

RE.LE.VI. S.p.A. - Via Postumia n.1- 46040 RODIGO Mantova - Italia

Phone +39.0376.684011 - FAX +39.0376.658076

www.relevi.it - info@relevi.it

Competent person responsible for the safety data sheet:

sds@relevi.it

#### 1.4. Emergency telephone number

24 hour poisons information in the UK: 0344 892 0111  
NHS 111

Company +39 0376 780632 (24/24h - 7/7d - Italian/English)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

⚠ Warning, Skin Irrit. 2, Causes skin irritation.

⚠ Danger, Eye Dam. 1, Causes serious eye damage.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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



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

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

Special Provisions:

None

Contains

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

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

None

Composition - Reg (EC) n ° 648/2004

Contains:

anionic surfactants

30 % and  
more

The product also contains:      Perfumes  
Allergens:                              LINALOOL

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq 0.1\%$

Other Hazards:

No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

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

| Qty                       | Name   | Ident. Number   | Classification   |
|---------------------------|--|---|--|
| $\geq 30\%$ -<br>$< 40\%$ | Benzenesulfonic acid,<br>C10-13-alkyl derivs.,<br>sodium salts | CAS:            68411-30-3<br>EC:              270-115-0<br>REACH No.: 01-<br>2119489428<br>-22 | ⚠ 3.1/4/Oral Acute Tox. 4 H302<br>⚠ 3.2/2 Skin Irrit. 2 H315<br>⚠ 3.3/1 Eye Dam. 1 H318<br>4.1/C3 Aquatic Chronic 3 H412<br>Acute Toxicity Estimate:<br>ATE - Oral 1058 mg/kg bw   |
| $< 0.05\%$                | Diphenyl ether   | CAS:            101-84-8<br>EC:              202-981-2<br>REACH No.: 01-<br>2119472545<br>-33   | ⚠ 3.3/2 Eye Irrit. 2 H319<br>⚠ 4.1/A1 Aquatic Acute 1 H400<br>M=1.<br>4.1/C3 Aquatic Chronic 3 H412<br>Acute Toxicity Estimate:<br>ATE - Oral 2450 mg/kg bw<br>ATE - Dermal 7940 mg/kg bw<br>ATE - Inhalation (Vapours) 2400<br>mg/l |

### SECTION 4: First aid measures

4.1. Description of first aid measures

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In case of skin contact:  
Wash with plenty of water and soap.

In case of eyes contact:  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:  
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:  
Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed  
None

4.3. Indication of any immediate medical attention and special treatment needed  
Treatment:  
None

#### SECTION 5: Firefighting measures

5.1. Extinguishing media  
Suitable extinguishing media:  
Water.  
Carbon dioxide (CO<sub>2</sub>).  
Extinguishing media which must not be used for safety reasons:  
None in particular.

5.2. Special hazards arising from the substance or mixture  
Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.  
Hazardous combustion products:

5.3. Advice for firefighters  
Use suitable breathing apparatus .  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

#### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures  
For non emergency personnel:  
Wear personal protection equipment.  
Remove persons to safety.  
See protective measures under point 7 and 8.  
For emergency responders:  
Wear personal protection equipment.

6.2. Environmental precautions  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up  
Wash with plenty of water.

6.4. Reference to other sections  
See also section 8 and 13

#### SECTION 7: Handling and storage

7.1. Precautions for safe handling  
Avoid contact with skin and eyes, inhalation of vapours and mists.



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Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

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

None in particular

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

#### 7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Diphenyl ether - CAS: 101-84-8

EU - TWA(8h): 7 mg/m<sup>3</sup>, 1 ppm - STEL: 14 mg/m<sup>3</sup>, 2 ppm

ACGIH - TWA(8h): 1 ppm - STEL: 2 ppm - Notes: (V) - URT and eye irr, nausea

### DNEL Exposure Limit Values

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3

Worker Industry: 170 mg/kg - Consumer: 85 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Worker Industry: 12 mg/m<sup>3</sup> - Consumer: 3 mg/m<sup>3</sup> - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects

Consumer: 0.85 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

### PNEC Exposure Limit Values

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3

Target: Fresh Water - Value: 0.268 mg/l

Target: Marine water - Value: 0.0268 mg/l

Target: wastewater treatment plant - Value: 3.43 mg/l

Target: Freshwater sediments - Value: 8.1 mg/kg

### 8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

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

| Properties  | Value          | Method: | Notes: |
|---|----------------|---------|--------|
| Physical state:   | Solid          | --      | --     |
| Colour:   | Green - Purple | --      | --     |
| Odour:  | Floral         | --      | --     |
| Melting point/freezing point:                             | Not available  | --      | --     |
| Boiling point or initial boiling point and boiling range: | Not available  | --      | --     |
| Flammability:   | N.A.           | --      | --     |
| Lower and upper explosion limit:                          | Not available  | --      | --     |
| Flash point:  | Not available  | --      | --     |
| Auto-ignition temperature:                                | Not available  | --      | --     |
| Decomposition temperature:                                | Not available  | --      | --     |
| pH (sol. 1%):   | 7.0± 2.0       | --      | --     |
| Kinematic viscosity:                                      | N.A.           | --      | --     |
| Solubility in water:                                      | Soluble        | --      | --     |
| Solubility in oil:  | Not available  | --      | --     |
| Partition coefficient n-octanol/water (log value):        | Not available  | --      | --     |
| Vapour pressure:  | Not available  | --      | --     |
| Density and/or relative density:                          | Not available  | --      | --     |
| Relative vapour density:                                  | Not available  | --      | --     |
| Particle characteristics:                                 |                |         |        |
| Particle size:  | N.A.           | --      | --     |

#### 9.2. Other information



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| Properties | Value         | Method: | Notes: |
|------------|---------------|---------|--------|
| Viscosity: | Not available | --      | --     |

#### SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
None
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
None in particular.
- 10.6. Hazardous decomposition products  
None.

#### SECTION 11: Toxicological information

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

Toxicological information of the product:

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a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3



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- a) acute toxicity
    - ATE - Oral 1058 mg/kg bw
    - Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
    - Test: LD50 - Route: Oral - Species: Rat = 1080 mg/kg
  - d) respiratory or skin sensitisation:
    - Test: Skin Sensitization - Route: Skin - Species: GUINEA PIG Negative
  - e) germ cell mutagenicity:
    - Test: OECD476 - Species: Generic Bacteria Negative
- Diphenyl ether - CAS: 101-84-8
- a) acute toxicity
    - ATE - Oral 2450 mg/kg bw
    - ATE - Dermal 7940 mg/kg bw
    - ATE - Inhalation (Vapours) 2400 mg/l
    - Test: LD50 - Route: Oral - Species: Rat = 2450 mg/kg
    - Test: LC50 - Route: Inhalation - Species: Rat > 2400 mg/l
    - Test: LD50 - Route: Skin - Species: Rabbit > 7940 mg/kg

- 11.2. Information on other hazards
- Endocrine disrupting properties:  
No endocrine disruptor substances present in concentration  $\geq 0.1\%$

#### SECTION 12: Ecological information

- 12.1. Toxicity
- Adopt good working practices, so that the product is not released into the environment.
- FLUSH WC CHAIN TROPICAL 2X48G
- The product is classified: Aquatic Chronic 3 - H412
- Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3
- a) Aquatic acute toxicity:
    - Endpoint: EC50 - Species: Daphnia = 2.9 mg/l - Duration h: 48
    - Endpoint: LC50 - Species: Fish = 1.67 mg/l - Duration h: 96
  - b) Aquatic chronic toxicity:
    - Endpoint: NOEC - Species: Algae = 3.1 mg/l - Duration h: 360
    - Endpoint: NOEC - Species: Daphnia = 1.41 mg/l - Duration h: 540
    - Endpoint: NOEC - Species: Fish = 0.23 mg/l - Duration h: 672
- 12.2. Persistence and degradability
- Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3
- Biodegradability: Readily biodegradable - Test: CO2 Evolution Test - Duration: 29gg - %: 85 - Notes: OECD 301B Ready biodegradability
- 12.3. Bioaccumulative potential
- Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts - CAS: 68411-30-3
- Bioaccumulation: .2 - Test: Kow - Partition coefficient 3.32
- 12.4. Mobility in soil
- N.A.
- 12.5. Results of PBT and vPvB assessment
- vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
- No endocrine disruptor substances present in concentration  $\geq 0.1\%$
- 12.7. Other adverse effects
- None

#### SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
- Recover if possible. In so doing, comply with the local and national regulations currently in force.



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#### SECTION 14: Transport information

- 14.1. UN number or ID number  
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name  
N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments  
N.A.

#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 2020/878  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)  
Regulation (EU) n. 2018/669 (ATP 11 CLP)  
Regulation (EU) n. 2018/1480 (ATP 13 CLP)  
Regulation (EU) n. 2019/521 (ATP 12 CLP)  
Regulation (EU) n. 2020/217 (ATP 14 CLP)  
Regulation (EU) n. 2020/1182 (ATP 15 CLP)  
Regulation (EU) n. 2021/643 (ATP 16 CLP)  
Regulation (EU) n. 2021/849 (ATP 17 CLP)  
Regulation (EU) n. 2022/692 (ATP 18 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:  
Restrictions related to the product:  
No restriction.
- Restrictions related to the substances contained:  
Restriction 40  
Restriction 75
- Where applicable, refer to the following regulatory provisions :  
Directive 2012/18/EU (Seveso III)





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Regulation (EC) nr 648/2004 (detergents).  
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):  
Seveso III category according to Annex 1, part 1  
None

15.2. Chemical safety assessment  
No Chemical Safety Assessment has been carried out for the mixture.  
Substances for which a Chemical Safety Assessment has been carried out:  
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

#### SECTION 16: Other information

Text of phrases referred to under heading 3:  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H412 Harmful to aquatic life with long lasting effects.  
H319 Causes serious eye irritation.  
H400 Very toxic to aquatic life.

| Hazard class and hazard category | Code       | Description                                    |
|----------------------------------|------------|--|
| Acute Tox. 4                     | 3.1/4/Oral | Acute toxicity (oral), Category 4              |
| Skin Irrit. 2                    | 3.2/2      | Skin irritation, Category 2                    |
| Eye Dam. 1                       | 3.3/1      | Serious eye damage, Category 1                 |
| Eye Irrit. 2                     | 3.3/2      | Eye irritation, Category 2                     |
| Aquatic Acute 1                  | 4.1/A1     | Acute aquatic hazard, category 1               |
| Aquatic Chronic 3                | 4.1/C3     | Chronic (long term) aquatic hazard, category 3 |

This safety data sheet has been completely updated in compliance to Regulation 2020/878.  
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure |
|---|--------------------------|
| Skin Irrit. 2, H315                                       | Calculation method       |
| Eye Dam. 1, H318  | Calculation method       |
| Aquatic Chronic 3, H412                                   | Calculation method       |

This document was prepared by a competent person who has received appropriate training.  
Main bibliographic sources:  
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities



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SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold  
CCNL - Appendix 1

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

|             |  |
|-------------|--|
| ADR:        | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| ATE:        | Acute Toxicity Estimate  |
| ATEmix:     | Acute toxicity Estimate (Mixtures)   |
| BIODG06:    | CO2 Evolution Test   |
| CAS:        | Chemical Abstracts Service (division of the American Chemical Society).              |
| CLP:        | Classification, Labeling, Packaging.   |
| DNEL:       | Derived No Effect Level.   |
| EC50:       | Effect Concentration 50  |
| EINECS:     | European Inventory of Existing Commercial Chemical Substances.                       |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany.  |
| GG:         | Days   |
| GHS:        | Globally Harmonized System of Classification and Labeling of Chemicals.              |
| IATA:       | International Air Transport Association.   |
| IATA-DGR:   | Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  |
| ICAO:       | International Civil Aviation Organization.   |
| ICAO-TI:    | Technical Instructions by the "International Civil Aviation Organization" (ICAO).    |
| IMDG:       | International Maritime Code for Dangerous Goods.                                     |
| INCI:       | International Nomenclature of Cosmetic Ingredients.                                  |
| KSt:        | Explosion coefficient.   |
| LC50:       | Lethal concentration, for 50 percent of test population.                             |
| LD50:       | Lethal dose, for 50 percent of test population.                                      |
| N.A.:       | Not applicable   |
| NOEC:       | no effective concentration observed  |
| OECD:       | Organization for Economic Cooperation and Development                                |
| PNEC:       | Predicted No Effect Concentration.   |
| RID:        | Regulation Concerning the International Transport of Dangerous Goods by Rail.        |
| STEL:       | Short Term Exposure limit.   |
| STOT:       | Specific Target Organ Toxicity.  |
| TLV:        | Threshold Limiting Value.  |
| TWA:        | Time-weighted average  |
| WGK:        | German Water Hazard Class.   |