SAFETY DATA SHEET

DATE OF COMPILATION: 01.09.2019

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VERSION NUMBER: 2.1

Safety data sheet in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Trade name: **TOILET BLOCK FIVE FORCE MELON**

Designation: **Toilet block on the basis of surface-active agents and fragrant component.**

Contains: **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts; Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts.**

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified uses: **Product for cleaning and refreshing toilet bowls.**

Uses advised against: **any type of uses not mentioned above and in point 7.3.**

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

Manufacturer: **"POL-HUN" M. BIELSKA SP. J.**
Address: 11 Listopada 65, 95-040 Koluszki, Poland
Telephone: +48 (44) 725 30 00
E-mail address for a person responsible for the SDS: polhun@polhun.pl

1.4. EMERGENCY TELEPHONE NUMBER

+48 (44) 725 30 19 (LABORATORY „**POL-HUN" M. BIELSKA SP. J.** (available during working days from 7^{00} a.m. up 20^{00} p.m.)

112 – EMERGENCY TELEPHONE NUMBER

SECTION 2 : HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The mixture is classified according to REGULATION (EC) No 1272/2008 as:

Eye Dam. 1 - Eye Damage of category 1 with hazard statement:
H318 Causes serious eye damage.

Skin Irrit. 2 - Skin Irritation of category 2 with hazard statement:
H315 Causes skin irritation.

Aquatic Chronic 3 - Hazardous to the aquatic environment – Chronic Hazard of category 3 with hazard statement:
H412 Harmful to aquatic life with long lasting effects.

2.2. LABEL ELEMENTS

Hazard pictogram:

Signal word: **Danger**

Hazard statements:

H318	**Causes serious eye damage.**
H315	**Causes skin irritation.**
H412	**Harmful to aquatic life with long lasting effects**.

Precautionary Statements:

P102	**Keep out of reach of children.**
P101	**If medical advice is needed, have product container or label at hand.**
P280	**Wear protective gloves and eye protection.**
P305+P351+P338	**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**
P310	**Immediately call a POISON CENTER/doctor.**
P302+P352	**IF ON SKIN: Wash with plenty of water.**
P501	**Dispose of contents/container to the person entitled to the disposal of waste or stored in a place designated by the municipality.**
Contains:	**Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts; Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts.**
EUH208	**Contains: 2,6-dimethylhept-5-enal; 2-isopropoxyethyl salicylate; 4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde. May produce an allergic reaction.**

Detergent labeling according to Detergent Regulation 648/2004/EC:
Constituents: anionic surfactants >30%; non-ionic surfactants <5%; perfumes.

2.3. OTHER HAZARDS

The ingredients of mixture do not meet the criteria for PBT and vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

not applicable.

3.2. MIXTURES

Hazard substances and substances for which there are Community workplace exposure limits:

Substance name	Concentration (% m/m)	Number CAS	Number WE	Number registration	Classification in accordance with Directive (WE) nr 1272/2008
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	**15 - 20**	**68411-30-3**	**270-115-0**	**01-2119489428-22-xxxx**	**Acute Tox. 4; H302** **Eye Dam. 1; H318** **Skin Irrit. 2; H315** **Aquatic Chronic 3; H412**
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	**10 - 15**	**68439-57-6**	**270-407-8** **[931-534-0]**	**01-2119513401-57-xxxx**	**Eye Dam. 1, H318** **Skin Irrit. 2, H315**
Sulfuric acid, mono-C12-18-alkyl esters, sodium salts	**1-5**	**68955-19-1**	**273-257-1**	**01-2119490225-39-xxxx**	**Skin Irrit. 2, H315** **Eye Dam. 1, H318** **Aquatic Chronic 3; H412**
Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	**0,1 – 2,0**	**90622-77-8**	**292-481-0** **[931-338-5]**	**01-2119489413-33-xxxx**	**Skin Irrit. 2, H315** **Eye Dam. 1, H318** **Aquatic Chronic. 2; H411**
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	**0,1 - 1,0**	**68891-38-3**	**500-234-8**	**01-2119488639-16-xxxx**	**Eye Dam. 1; H318** **Skin Irrit. 2; H315** **Aquatic Chronic 3; H412**
2,6-dimethylhept-5-enal *(ingredient of fragrance)*	**0,04 - < 0,15**	**106-72-9**	**203-427-2**	**01-2120270305-62-xxxx**	**Skin Sens. 1B; H317**
2-isopropoxyethyl salicylate *(ingredient of fragrance)*	**0,04 - < 0,15**	**79915-74-5**	**279-348-2**	**01-2120765193-53-xxxx**	**Acute Tox. 4; H302** **Skin Sens. 1B; H317**
4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde *(ingredient of fragrance)*	**0,04 - <0,15**	**37677-14-8**	**253-617-4**	**01-2120769662-44-xxxx**	**Eye Dam. 1; H318** **Skin Irrit. 2; H315** **Skin Sens. 1B; H317** **Aquatic Acute 1; H400** **Aquatic Chronic 1; H410**

Full texts of hazard statements is listed in section 16.

SECTION 4 : FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation:
- not an inhalation hazard under normal conditions of use; if necessary move to fresh air.

Eye:
- remove any contact lenses;
- flush with plenty of water for at least 10-15 minutes with the eyelids held wide open, avoid strong stream of water, which can cause cornea injury;
- do not use any medicines before getting medical attention;
- get medical attention immediately;

Skin:
- take off all contaminated clothing immediately;
- wash off with plenty of water;
- get medical advice if irritation persists.

Ingestion:
- rinse mouth with plenty of water;
- do not induce vomiting;
- if vomiting occurs, the head should be kept low so that the vomit does not enter the lungs (aspiration);
- seek medical advice immediately.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED
- inhalation – none; no adverse effect expected when used as directed.
- skin contact - irritation, redness; no adverse effect expected when used as directed.
- eye contact – serious eye damage, irritation, pain, watering, redness; no adverse effect expected when used as directed.
- ingestion – irritant to mouth, throat and stomach; no adverse effect expected when used as directed.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
No data available.

SECTION 5. FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA
Suitable extinguishing media: extinguishing dry chemical powder, foam.
Unsuitable extinguishing media: direct water jet.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE
Combustion products: sulphur oxides and carbon oxides.

5.3. ADVICE FOR FIREFIGHTERS
Wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
For non-emergency personnel:
- avoid contact with skin and eyes;
- wear chemical protection gloves and suits;
- wear appropriate goggles.

For emergency responders:
Suitable fabric for personal protective clothing:
- appropriate: gloves - nitrile rubber, neoprene, PVC, according to EN 374; suitability and durability of gloves is dependent on application, frequency, duration of contact, chemical resistance of glove material.
- not appropriate: no data.

6.2. ENVIRONMENTAL PRECAUTIONS

- keep away from drains, surface- and ground-water and soil.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

- clean up spillage promptly;
- collect free product and transfer it to suitable tanks or containers for safe disposal;
- dispose of according to the local regulations.

6.4. REFERENCE TO OTHER SECTIONS

Information regarding safe handling – see section 7.
Information regarding personal protection – see section 8.
Information regarding disposal consideration - see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

- handle in accordance with good manufacturing practices and personal hygiene;
- avoid contact with skin and eyes;
- wash hands after use;
- wash any exposed skin immediately after any chemical contact;
- do not eat, drink and smoke in work areas;
- remove contaminated clothing and protective equipment before entering eating areas;
- wear protective equipment.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- store in a cool (5°C -35°C), dry**,** well ventilated area;
- keep containers upright and tightly closed;
- keep away from food, oxidising substances, acids.

7.3. SPECIFIC END USE(S)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

The mixture does contain substances with the national occupational exposure limit values that correspond to Union occupational exposure limit values in accordance with Directive 98/24/EC, including any notations as referred to in Article 2(3) of Commission Decision 2014/113/EU;

Substance name and CAS number	***OEL-TWA***		***STEL***		***Country, Publication***
	ppm	***mg/m³***	***ppm***	***mg/ m³***	
Titanium dioxide [13463-67-7]	**-**	**10**	**-**	**-**	*[Poland]Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 (DZ.U. 2018 poz. 286*
Titanium dioxide [13463-67-7]	**-**	**10**	**-**	**-**	*[Belgium]*
Titanium dioxide [13463-67-7]	**-**	**6 total dust**	**-**	**12 total dust**	*[Denmark]*
Titanium dioxide [13463-67-7]	**-**	**11 inhalable aerosol**	**-**	**-**	*[France]*
Titanium dioxide [13463-67-7]	**-**	**0,3 (1)(2)(3)**	**-**	**2,4 (1)(2)(3)(4)**	*[Germany]*

Titanium dioxide [13463-67-7]	**-**	**10 (1)** **4 (2)**	**-**	**-**	*[Ireland]*
Titanium dioxide [13463-67-7]	**-**	**10**	**-**	**-**	*[Latvia]*
Titanium dioxide [13463-67-7]	**-**	**10**	**-**	**15 (1)**	*[Romania]*
Titanium dioxide [13463-67-7]	**-**	**10 Inhalable aerosol**	**-**	**-**	*[Spain]*
Titanium dioxide [13463-67-7]	**-**	**5 Inhalable aerosol**	**-**	**-**	*[Sweden]*
Titanium dioxide [13463-67-7]	**-**	**10 inhalable aerosol** **4 respirable aerosol**	**-**	**-**	*[United Kingdom]*

Remarks:
Germany: (1) Excluding ultrafine particles (2) Respirable fraction (3) Multiplied by the material density (4) 15 minutes average value.
Ireland: (1) Inhalable fraction (2) Respirable fraction.
Romania: (1) 15 minutes average value.
Source: Based on GESTIS International Limit values Database.

Substance name and CAS number	***OEL-TWA***		***STEL***		***Country, Publication***
	ppm	***mg/m³***	***ppm***	***mg/ m³***	
Cellulose (pure) [9004-34-6]	**-**	**10**	**-**	**-**	*[Belgium]*
Cellulose (pure) [9004-34-6]	**-**	**10 inhalable aerosol**	**-**	**-**	*[France]*
Cellulose (pure) [9004-34-6]	**-**	**10 (1)** **4 (2)**	**-**	**20 (1) (3)**	*[Ireland]*
Cellulose (pure) [9004-34-6]	**-**	**2**	**-**	**-**	*[Latvia]*
Cellulose (pure) [9004-34-6]	**-**	**10 inhalable aerosol**	**-**	**-**	*[Spain]*
Cellulose (pure) [9004-34-6]	**-**	**10 inhalable aerosol** **4 respirable aerosol**	**-**	**-**	*[United Kingdom]*

Remarks:
Ireland: (1) Inhalable fraction (2) Respirable fraction (3) 15 minutes reference period.

Source: Based on GESTIS International Limit values Database.

The mixture does not contain substances with the national occupational exposure limit values that correspond to Union limit values in accordance with Directive 2004/37/EC, including any notations as referred to in Article 2(3) of Decision 2014/113/EU;

The mixture does not contain substances with the national biological limit values that correspond to Union biological limit values in accordance with Directive 98/24/EC, including any notations as referred to in Article 2(3) of Decision 2014/113/EU;

DNEL (*Derived No Effect Level)* **VALUES** *determined for* **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3] (all values are in mg/kg 100% product):**

Exposure time	Group	Route of exposure	Value
Long-term (repeated)	Worker	dermal	170 mg/kg bw/day
Long-term (repeated)	Worker	inhalation	12 mg/m^3
Long-term (repeated)	Consumer	oral	0,85 mg/kg bw/day
Long-term (repeated)	Consumer	dermal	85 mg/kg bw/day
Long-term (repeated)	Consumer	inhalation	3 mg/m^3

DNEL (*Derived No Effect Level)* **Values** *determined for* **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**

Exposure time	Group	Route of exposure	Value
Long-term repeated	Worker	dermal	4060 mg/kg bw/day
Long-term repeated	Worker	inhalation	285 mg/m^3
Long-term repeated	Consumer	oral	24 mg/kg bw/day
Long-term repeated	Consumer	dermal	2440 mg/kg bw/day
Long-term repeated	Consumer	inhalation	85 mg/m^3

DNEL (*Derived No Effect Level)* **Values** *determined for* **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**

Exposure time	Group	Route of exposure	Value
Long-term systemic	Worker	dermal	2158.33 mg/kg bw/day
Long-term	Worker	inhalation	152.22 mg/m^3
Long-term	Consumer	oral	12.95 mg/kg bw/day
Long-term	Consumer	dermal	1295 mg/kg bw/day
Long-term	Consumer	inhalation	45,04 mg/ m^3

DNEL (*Derived No Effect Level)* **Values** *determined for* **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**

Exposure time	Group	Route of exposure	Value
Long-term systemic	Worker	dermal	4,16 mg/kg bw/day
Long-term systemic	Worker	inhalation	73,4 mg/m^3
Long-term systemic	Consumer	oral	6,25 mg/kg bw/day
Long-term systemic	Consumer	dermal	2,5 mg/kg bw/day
Long-term systemic	Consumer	inhalation	21,73 mg/m3

DNEL (*Derived No Effect Level)* **Values** *determined for* **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**

Exposure time	Group	Route of exposure	Value
Long-term systemic	Worker	dermal	2750 mg/kg bw/day
Long-term, systemic	Worker	inhalation	175 mg/m^3
Long-term, systemic	Consumer	oral	15 mg/kg bw/day
Long-term, systemic	Consumer	dermal	1650 mg/kg bw/day
Long-term, systemic	Consumer	inhalation	52 mg/m3

DNEL (*Derived No Effect Level)* **Values** *determined for* **Titanium Dioxide No CAS [13463-67-7]:**

Exposure time	Group	Route of exposure	Value
Long-term, systemic	Worker	inhalation	10 mg/m^3
Long-term, systemic	Consumer	oral	700 mg/kg bw/day

PNEC Values (*Predicted No Effect Concentration*) for **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**

Route of exposure	Value
Water	0,268 mg/L
Sewage treatment plant STP	3,43 mg/L
Marine Water	0,0268 mg/L
Sediment (Fresh Water)	8,1 mg/kg

PNEC Values (*Predicted No Effect Concentration*) for **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**

Route of exposure	Value
Fresh Water	0,024mg/L
Sewage treatment plant STP	4 mg/L
Marine Water	0,0024 mg/L

Sediment (Fresh Water)	0,767 mg/kg
Sediment (Marine Water)	0,0767 mg/kg
Soil	1,21 mg/kg

PNEC Values (*Predicted No Effect Concentration*) for **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**

Route of exposure	Value
Water	0,098 mg/L
Sewage treatment plant STP	1084 mg/L
Marine Water	0,0098 mg/L
Sediment	3,45 mg/kg
Sediment (Marine)	0,345 mg/kg
Soil	0,631 mg/kg

PNEC Values (*Predicted No Effect Concentration*) for **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**

Route of exposure	Value
Fresh Water	0,007mg/L
Sewage treatment plant STP	830 mg/L
Marine Water	0,0007 mg/L
Sediment (fresh water)	1,201 mg/kg
Sediment (marine water)	0,120 mg/kg
Soil	0,2354 mg/kg

PNEC Values (*Predicted No Effect Concentration*) for **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS: [68891-38-3]**

Route of exposure	Value
Fresh Water	0,24 mg/L
Sewage treatment plant STP	10 000 mg/L
Marine Water	0,024 mg/L
Sediment (fresh water)	5,45 mg/kg
Sediment (marine water)	0,545 mg/kg
Soil	0,946 mg/kg

PNEC Values (*Predicted No Effect Concentration*) for **Titanium Dioxide No CAS [13463-67-7]:**

Route of exposure	Value
Fresh Water	0,127mg/L
Sewage treatment plant STP	100 mg/L
Marine Water	1 mg/L
Sediment (fresh water)	1000 mg/kg
Sediment (marine water)	100 mg/kg
Soil	100 mg/kg

8.2. EXPOSURE CONTROLS

Personal protective equipment:

Respiratory protection:

- is not required during normal operations in a workplace.

Eye protection:

- use protective tight-fitting goggles if eye exposure is reasonably probable.

Hand protection:

- in case of long contact with product use suitable protective gloves

(suitable materials: neoprene, nitrile rubber, polyethylene or PVC- thickness 0,12mm; breakthrough time > 2hours) according to EN 374.

Skin protection: use protective clothing against chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Physical state	solid
Colour:	orange and red
Odour :	characteristic
Odour threshold:	not determined
pH :	7,0 – 10,0 (1% solution)
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable
Evaporation rate:	not determined
Flammability (solid, gas):	not combustible
Upper/lower flammability or explosive limits:	not applicable
Vapour pressure:	not determined
Vapour density:	not determined
Relative density:	not determined
Solubility(ies):	soluble in water;
Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	not applicable
Decomposition temperature:	no data for product;
Viscosity:	not applicable
Explosive properties:	not applicable
Oxidising properties:	not applicable

9.2. OTHER INFORMATION

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

The reactivity hazards of mixture has not been tested.

10.2 CHEMICAL STABILITY

Product is stable under recommended conditions of storage.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

None under normal conditions.

10.4. CONDITIONS TO AVOID

Keep away from humidity, high temperatures; keep away from source of heat and source of fire.

10.5. INCOMPATIBLE MATERIALS

Strong mineral acids.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Sulphur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity:

The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

ATE mix (oral) = 5100 mg/kg. (calculated according point 3.1.3.6.1. Annex I of Regulation CLP 1272/2008).

Acute toxicity of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No[68411-30-3]:**

LD50 (oral): ~1020 mg/kg (rat);

Acute toxicity of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium**

salts CAS No [68439-57-6]:
LD50 (oral): 2079 mg/kg (rat);
LD50 (dermal): 6300-13500mg/kg (rabbit);
LC50 (inhalation): >52 mg/l/4hours (rat).
Acute toxicity of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
LD50 (oral): >5000 mg/kg (rat).
LD50 (dermal): >2000 mg/kg (rabbit).
Acute toxicity of - **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
LD50 (oral): ~ 2600 mg/kg (rat).
Acute toxicity of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
LD50 (oral): 4100 mg/kg (rat).
LD50 (dermal): >2000 mg/kg (rat).

Skin corrosion/irritation:
The mixture has not been tested. Based on the available data of the ingredients the mixture is classified as - **Causes skin irritation.**
Irritant effect of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**
Causes skin irritation.
Irritant effect of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test OECD 404 Acute Dermal Irritation/Corrosion – rabbit- Result - Causes skin irritation.
Irritant effect of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
Causes skin irritation.
Irritant effect of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Causes skin irritation.
Irritant effect of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
- skin: causes irritation.

Serious eye damage/eye irritation:
The mixture has not been tested. Based on the available data of the ingredients the mixture is classified as - **Causes serious eye damage.**
Irritant effect of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No[68411-30-3]:**
Causes serious eye damage. May irritate and cause redness and pain.
Irritant effect of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test OECD 405 Acute Eye Irritation (rabbit) – Result - causes eye damage.
Irritant effect of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
Causes serious eye damage.
Irritant effect of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Causes serious eye irritation. May irritate and cause redness and pain.
Irritant effect of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
- eyes: causes serious eye damage.

Respiratory or skin sensitization:
The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met, but the mixture contains: **2,6-dimethylhept-5-enal; 2-isopropoxyethyl salicylate; 4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde;** may produce an allergic reaction.
Skin sensitization of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No[68411-30-3]:**
Not classified.
Sensitization effect **of Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test OECD 406 skin sensitization (guinea pig), result - has no sensitizing properties.
Sensitization effect **of Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
Not classified.
Sensitization effect **of Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Not classified.
Sensitization effect **of Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
- has no sensitizing properties (test OECD 406, guinea pig).

Germ cell mutagenicity:

The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

Mutagenicity effect **of Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**
Not mutagenic substance.

Mutagenicity effect **of Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test OECD 471 Bacterial Reverse Mutation Test, result- negative;
Test OECD 473 In vitro Mammalian Chromosomal Aberration Test, result- negative.

Mutagenicity effect **of Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
No mutagenic effect was found in various test with bacteria and mammalian cell culture.
Ames test – result – negative.

Mutagenicity effect **of Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Not classified.

Mutagenicity effect **of Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
Not expected to be mutagenic.

Carcinogenicity:
The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

Carcinogenicity of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts No CAS [68411-30-3]:**
No known evidence of carcinogenic properties.

Carcinogenicity of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test – rat – exposure time: 2 years, 7 days per week (oral), result- negative.
Test – mouse - exposure time : 92 weeks, 3 days per week, (dermal), result- negative.

Carcinogenicity of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
Not classified.

Carcinogenicity of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Not classified.

Carcinogenicity **of Alcohols, C12-14, ethoxylated, sulfates, sodium salts CAS No [68891-38-3]:**
No carcinogenic effects.

Reproductive toxicity:
The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

Reproductive toxicity of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**
No reproductive toxicity.

Reproductive toxicity of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No[68439-57-6]:**
Test OECD 414 Prenatal Developmental Toxicity Study, mouse, result: 2 mg/kg NOAEL.

Reproductive toxicity of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Not classified.

Reproductive toxicity of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
Not classified.

STOT – single exposure:
The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

STOT – repeated exposure:
The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

Aspiration hazard:
Not applicable, the mixture is solid.

Routes of exposure
The mixture has not been tested – no available data.

Symptoms related to the physical, chemical and toxicological characteristics:
inhalation – none;

skin contact - irritation, redness and pain of skin;
eye contact – serious damage to eyes; irritation, pain, watering, redness ;
ingestion – irritant to mouth, throat and stomach, may cause nausea, vomiting, stomach pains.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:
No available data.

Interactive effects:
No available data.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

The mixture has not been tested. Based on the available data of the ingredients the mixture is classified as - **Harmful to aquatic life with long lasting effects.**

Toxicity of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**
Fish - **LC50: 1,67 mg/L/96h***(Species: Bluegill sunfish);*
Algae– **EC50: 29 mg/L/96h** *(Species: Pseudokirchneriella sub);*
Daphnia – **LC50: 6,5 mg/L/96h** *(Species: Chironomus riparius)*
Long term study: NOEC (Fish, 28-196 days): 0,23 – 3,2 mg/L
Long term study: NOEC (Algae, 15-28 days): 3,1 – 4,0 mg/L.
Long term study: NOEC (crustaceans, 2-32 days): 0,59 – 4,5mg/L.

Toxicity of **Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:**
Test ISO 10253:2006 - Marine algal growth inhibition test with Skeletonema costatum and Phaeodactylum tricornutum **ErC50: 5,2mg/L/72 hours.**
Test OECD 202 Daphnia sp. Acute Immobilisation Test, **EC50: 4,53 mg/L/48hours.**
Test OECD 209 Activated Sludge, Respiration Inhibition Test, Chronic **EC10 (Bacteria): 40 mg/L/3 hours**.
Test OECD 203 Fish, Acute Toxicity Test, **LC50: 4,2 mg/L/96 hours.**
Test OECD 211 Daphnia Magna reproduction test – Chronic NOEC(daphnia): 6,3 mg/l/21days.

Acute toxicity of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**
Fish – **LC50: 10-100 mg/L** – method ISO 7346/2 (*Brachydanio rerio*).
Daphnia – **EC50: 10-100 mg/L** – method OECD 202.
Algae– **EC50: 1-10 mg/L** – method: OECD 201 *(Desmodesmus subspicatus).*
Bacteria – **EC0: >100mg/L** – method OECD 209 *(Pseudomonas putida).*

Toxicity of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**
Fish – **LC50: 17 mg/L**/96h.- (*Cyprinus carpio*).
Daphnia – EC50: 15mg/L/48h *(Daphnia magna).*
Algae – ERC50: >20mg/L/72h. *(Desmodesmus subspicatus).*
Long term study: NOEC (Fish *Pimephales promelas*, 42 days): <1,357 mg/L
Long term study: NOErC (Algae *Desmodesmus subspicatus*, 72 hours): < 3mg/L
Long term study: NOEC (crustaceans *Ceriodaphnia dubia*, 7 days): < 0,419 mg/L.

Toxicity of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:**
Fish – LC50: 7,1 mg/L/96h;
Daphnia – EC50: 7,2mg/l/48h;
Algae– EC50: 7,5mg/L/96h;
NOEC: 1,2mg/l (Fish, QSAR, literature data);
NOEC: 0,27 mg/l/96h (aquatic invertebrates).

Toxicity of **4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde No CAS [37677-14-8]:**
LC50: 3,50 mg/L/96h.

12.2. PERSISTENCE AND DEGRADABILITY

The mixture has not been tested - no available data.

Persistence and degradability of Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:
Readily biodegradable in water, in sediment and soil.
Biodegradability: >85%, (Method OECD Screening test 301D and 303A);
Contains surfactants with biodegradability of 85% in 29 days – it is not persistent, but readily biodegradable.

Persistence and degradability of Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts CAS No [68439-57-6]:
Readily biodegradable.
Test OECD 306 Biodegradability in Seawater – 92%- 28 days.

Test OECD 301B Ready Biodegradability – CO2- evolution test- 80% - 28days.

Persistence and degradability of Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:

Readily biodegradable according to OECD criteria.

Persistence and degradability of Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:

Readily biodegradable in water, in sediment and soil.
Method – Primary biodegradation EU C4-C Result: > 93% (28 days).
Contains surfactants with biodegradability of more than 93% in 28 days.- it is not persistent, but readily biodegradable.

Biodegradation of Alcohols, C12-14, ethoxylated, sulfates, sodium salts No CAS [68891-38-3]:

Readily biodegradable.
Biodegradability: 100%- 28 days.

12.3. BIOACCUMULATIVE POTENTIAL

The mixture has not been tested - no available data.

Bioaccumulative potential of **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:**

Total biodegradation: >70% DOC (OECD 301D).
Total biodegradation: >60% Oxygen uptake (OECD 301F).
Simulation test: 80 – 95% CAS (OECD 303A).
Inherent test: 95 – 98% (OECD 302A, B).
Bioconcentration factor BCF: 2 -1000.
The bioaccumulation potential is evaluated to be low.

Bioaccumulative potential of **Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS No [68439-57-6]:**

LogPow: -1,3;
BCF: 70,8;
It has low potential to accumulate.

Bioaccumulative potential of **Sulfuric acid, mono-C12-18-alkyl esters, sodium salts CAS No [68955-19-1]:**

Total biodegradation: 88 - 96% MOST (OECD 301E).
Total biodegradation: 63 – 95% (Closed Bottle Test).
Total biodegradation: 64 – 96% Sturm (OECD 301B)
Bioconcentration factor: BCF: -2,1 (OECD 107). Result: No potential for bioaccumulation.

Bioaccumulative potential of **Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:**

Significant accumulation in organisms is not to be expected.

Bioaccumulative potential of **Alcohols, C12-14, ethoxylated, sulfates, sodium salts CAS No [68891-38-3]:**

LogPow: 0,3.
Low bioaccumulation potential.

12.4. MOBILITY IN SOIL

The mixture has not been tested - no available data.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS No [68411-30-3]:

Based on the high value of the absorption/desorption coefficient (LogKoc = 3,4) the substance is expected to have low mobility in soil.

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS No [68439-57-6]:

Koc (soil/water partition coefficient): 2562.

Amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl No CAS [90622-77-8]:

Adsorption in soil: adsorption to solid soil phase is expected.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

The mixture has not been tested - no available data.
The components of mixture are not classified as PBT or vPvB.

12.6. OTHER ADVERSE EFFECTS

The mixture has not been tested - no available data.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

- dispose of according to local, state or national legislation;
- avoid disposing into drainage systems and into the environment;
- contaminated packaging dispose in the same way as the product itself.
- non-contaminated packages may be recycled

SECTION 14: TRANSPORT INFORMATION

ADR/RID/ADN/IMDG/IATA:

14.1. UN NUMBER : not applicable.

14.2. UN PROPER SHIPPING NAME: not applicable.

14.3. TRANSPORT HAZARD CLASS(ES): not applicable.

14.4. PACKING GROUP: not applicable.

14.5. ENVIRONMENTAL HAZARDS:
The mixture has not been tested - no available data.

14.6. SPECIAL PRECAUTIONS FOR USER
See sections 6 to 8 of this Safety Data Sheet.

14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE
Not applicable.

SECTION 15: REGULATORY INFORMATION

The mixture is not subject to *Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer , Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC or Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals*

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
Council Directive 98/24/EC of 7 April 1998 on the protection of the health an ad safety of workers from the risks related to chemical agents at work.
Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission directive 2000/39/EC.
COMMISSION DIRECTIVE (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU
Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.

15.2. CHEMICAL SAFETY ASSESSMENT

The chemical safety assessment has not been carried out for the mixture.

SECTION 16: OTHER INFORMATION

The changes: section 1, 3, 15, 16.
The classification of the mixture is based on:

- the category “acute toxicity” – an additive method;
- the category “skin corrosion/irritation” – an additive method;
- the category “serious eye damage/eye irritation” - an additive method;
- the category “respiratory or skin sensitization” – contents of sensitizing ingredients;
- the category “mutagenicity”- contents of classified ingredients;
- the category “carcinogenicity” – contents of classified ingredients;
- the category “reproductive toxicity” contents of classified ingredients;
- the category “STOT repeated exposure” contents of classified ingredients;
- the category “STOT single exposure” contents of classified ingredients;
- the category “aspiration hazard” – an additive method;
- the category ‘ecotoxicological properties” – an additive method.

Abbreviations and acronyms used in the safety data sheet:

PBT – *Persistent, Bioaccumulative, Toxic;*
vPvB – *Very Persistent and very Bioaccumulative;*
LD50 – *Lethal Dose, 50%;*
LC50 – *Lethal Concentration 50%;*
EC50 - *half maximal effective concentration;*
IC50 - *half maximal inhibitory concentration;*
OECD – *Organization for Economic Cooperation and Development;*
NOAEL - *No Observed Adverse Effect Level;*
NOEC – *No Observed Effect Concentration;*
BCF - bioconcentration factor.
logPow – octanol - water partition coefficient;
Koc - soil/water partition coefficient;
OEL – *Occupational Exposure Limit;*
TWA – *Eight – hour Time Weighted Average;*
STEL – *Short Term Exposure Limit.*
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID – Regulations concerning the International Carriage of Dangerous Goods by Rail (RID).
ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
IMDG – International Maritime Dangerous Goods Code.
IATA – International Air Transport Association.

List of hazard statements and precautionary statements which are not written out in full under Sections 2 to 15:

Acute Tox. 4	Acute toxicity of category 4.
Eye Dam. 1	Eye Damage of category 1.
Skin Irrit. 2	Skin Irritation of category 2.
Skin Sens. 1B	Skin Sensitization of category 1B.
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard of category 1.
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard of category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard of category 2.
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard of category 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

The information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. This document is neither a quality description of the product nor a guarantee of particular properties. The information are to be treated as aid to safety in transport, storage and usage of the product. This does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field. Due to possible changes in

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