

SAFETY DATA SHEET

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

1.1 Product identifier

Harpic Adhesive Toilet Block Floral

SDS number: D8396449

Code: 3239068 / 3275290

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

Toilet Bowl Cleaner

Consumer Use

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

RB UK Hygiene Home Commercial Ltd

Wellcroft House

Wellcroft Road

Slough, Berkshire SL1 4AQ

Tel: 0800 376 8181

Email: ConsumerCare_UK@reckitt.com

The Republic Of Ireland:

RB Ireland Hygiene Home Commercial Ltd

7 Riverwalk

Citywest Business Campus

Dublin 24

Ireland

Tel: 01 661 7318

Email: ConsumerHealth_IE@reckitt.com

1.4 Emergency telephone number

GB - NHS 111/NHS 24 Tel: 111

NI - www.gpoutofhours.hscni.net/

IE - Poisons Information Centre of Ireland: 01 809 2166 8am-10pm 7 days a week.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302

Skin Irrit. 2, H315

Eye Dam. 1, H318

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word

Hazard statements

- : Danger
- : Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

General

- : Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

Prevention

- : Wash hands thoroughly after handling.

Response

- : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Storage

- : Not applicable.

Disposal

- : Dispose of contents/container in accordance with local/regional regulations

Hazardous ingredients

- : Sodium C10-13 Alkyl Benzenesulfonate
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
LINALOOL
CITRONELLOL
D-LIMONENE
GERANIOL
LAURALDEHYDE
DIMETHYLtetrahydro benzaldehyde
2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE
DELTA-DAMASCONE
ROSE KETONE-4

Supplemental label elements

- : Contains (Citronellol, Geraniol, Linalool and Limonene). May produce an allergic reaction (only applicable for TDS# 3239068-Floral)

Ingredient Declaration:

Contains Anionic Surfactant 30% and more

Contains Nonionic surfactant < 5 %

Perfume

Formula TDS# 3239068 contains Citronellol, Geraniol, Limonene and Linalool (Floral)

Special packaging requirements

Containers to be fitted with child-resistant fastenings

- : Not applicable.

Tactile warning of danger

- : Yes, applicable.

SECTION 2: Hazards identification

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Sodium C10-13 Alkyl Benzenesulfonate	REACH #: 01-2119489428-22 EC: 270-115-0 CAS: 68411-30-3	≥25 - ≤50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	ATE [Oral] = 1080 mg/kg	[1]
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	REACH #: 01-2119489463-28 EC: 287-809-4 CAS: 85586-07-8	≥10 - ≤25	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg Eye Dam. 1, H318: C ≥ 20% Eye Irrit. 2, H319: 10% ≤ C < 20%	[1]
SODIUM CARBONATE	REACH #: 01-2119485498-19 EC: 207-838-8 CAS: 497-19-8 Index: 011-005-00-2	≤3	Eye Irrit. 2, H319	-	[1]
LINALOOL	REACH #: 01-2119474016-42 EC: 201-134-4 CAS: 78-70-6 Index: 603-235-00-2	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
CITRONELLOL	REACH #: 01-2119453995-23 EC: 203-375-0 CAS: 106-22-9	<1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
D_LIMONENE	REACH #: 01-2119529223-47 EC: 227-813-5 CAS: 5989-27-5 Index: 601-096-00-2	≤0.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
GERANIOL	REACH #: 01-2119552430-49 EC: 203-377-1 CAS: 106-24-1 Index: 603-241-00-5	≤0.3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317	-	[1]
LAURALDEHYDE	REACH #:	≤0.3	Skin Irrit. 2, H315	-	[1]

SECTION 3: Composition/information on ingredients

	01-2119969441-33 EC: 203-983-6 CAS: 112-54-9		Eye Irrit. 2, H319 Skin Sens. 1B, H317		
DIMETHYLtetrahydro BENZALDEHYDE	EC: 272-113-5 CAS: 68737-61-1	≤0.3	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
2,4-DIMETHYL- 3-CYCLOHEXENE CARBOXALDEHYDE	EC: 268-264-1 CAS: 68039-49-6	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
DIPHENYL ETHER	EC: 202-981-2 CAS: 101-84-8	≤0.3	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	M [Acute] = 1	[1] [2]
DELTA-DAMASCONE	EC: 260-709-8 CAS: 57378-68-4	<0.1	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
ROSE KETONE-4	REACH #: 01-2120105798-49 EC: 245-833-2 CAS: 23696-85-7	<0.1	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

- Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

- Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 4: First aid measures

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

SECTION 5: Firefighting measures

Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Small spill	: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product
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SECTION 7: Handling and storage

Advice on general occupational hygiene

residue and can be hazardous. Do not reuse container.

- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Toilet bowl cleaner Consumer use

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
DIPHENYL ETHER	<p>EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values</p> <p>STEL: 2 ppm 15 minutes.</p> <p>STEL: 14 mg/m³ 15 minutes.</p> <p>TWA: 1 ppm 8 hours.</p> <p>TWA: 7 mg/m³ 8 hours.</p>

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Sodium C10-13 Alkyl Benzenesulfonate	DNEL	Long term Inhalation	6 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	6 mg/m ³	Workers	Local
	DNEL	Long term Dermal	85 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.5 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	1.5 mg/m ³	General population [Consumers]	Local

SECTION 8: Exposure controls/personal protection

Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	DNEL	Long term Dermal	42.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.425 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	24 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	85 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	285 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	2440 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4060 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m³	General population	Local
	DNEL	Short term Inhalation	10 mg/m³	General population	Local
	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
SODIUM CARBONATE	DNEL	Long term Dermal	15 mg/cm²	Workers	Local
	DNEL	Short term Dermal	15 mg/cm²	Workers	Local
	DNEL	Long term Dermal	15 mg/cm²	General population [Consumers]	Local
	DNEL	Short term Oral	1.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	1.5 mg/cm²	General population	Local
	DNEL	Long term Dermal	1.5 mg/cm²	General population	Local
	DNEL	Long term Oral	2.49 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	3 mg/cm²	Workers	Local
	DNEL	Long term Dermal	3 mg/cm²	Workers	Local
LINALOOL	DNEL	Long term Dermal	3.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	4.33 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	24.58 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	161.6 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	327.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	47.8 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	196.4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	13.8 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	2.95 mg/cm²	General population	Local
	DNEL	Short term Dermal	2.95 mg/cm²	Workers	Local
CITRONELLOL	DNEL	Short term	10 mg/m³	General	Local

SECTION 8: Exposure controls/personal protection

D_LIMONENE	DNEL	Inhalation Long term Inhalation	10 mg/m ³	population General population Workers	Local
	DNEL	Short term Inhalation	10 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	10 mg/m ³	Workers	Local
	DNEL	Long term Oral	13.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	47.8 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	161.6 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	196.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	327.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	66.7 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9.5 mg/kg bw/day	Workers	Systemic
GERANIOL	DNEL	Long term Inhalation	16.6 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	4.8 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	4.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	9.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	16.6 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	66.7 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	7.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11.8 mg/cm ²	General population	Local
LAURALDEHYDE	DNEL	Long term Dermal	11.8 mg/cm ²	Workers	Local
	DNEL	Long term Dermal	12.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	13.75 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	47.8 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	161.6 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.00028 mg/cm ²	General population	Local
	DNEL	Long term Dermal	0.00057 mg/cm ²	Workers	Local
	DNEL	Long term Oral	7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	General population	Systemic
	DNEL	Long term	12.3 mg/m ³	General	Systemic

SECTION 8: Exposure controls/personal protection

DIPHENYL ETHER	DNEL	Inhalation Long term Dermal	14.1 mg/ kg bw/day 49.7 mg/m ³	population Workers	Systemic
	DNEL	Long term Inhalation	7 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	14 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	25 mg/kg bw/day	Workers	Local
	DNEL	Long term Dermal	59 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation		Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
LINALOOL	Fresh water	0.268 mg/l	Assessment Factors
	Marine water	0.027 mg/l	Assessment Factors
	Sewage Treatment Plant	3.43 mg/l	Assessment Factors
	Fresh water sediment	8.1 mg/kg	Assessment Factors
	Marine water sediment	6.8 mg/kg	Assessment Factors
	Soil	35 mg/kg	Sensitivity Distribution
	Fresh water	0.2 mg/l	Assessment Factors
	Marine water	0.02 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water	0.215 mg/l	Assessment Factors
PHENETHYL ALCOHOL	Marine water	0.021 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water sediment	1.454 mg/kg	Equilibrium Partitioning
	Marine water sediment	0.145 mg/kg	Equilibrium Partitioning
	Soil	0.164 mg/kg	Equilibrium Partitioning
	Fresh water	14 µg/l	Assessment Factors
	Marine water	1.4 µg/l	Assessment Factors
	Sewage Treatment Plant	1.8 mg/l	Assessment Factors
	Fresh water sediment	3.85 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.385 mg/kg dwt	Equilibrium Partitioning
D_LIMONENE	Soil	0.763 mg/kg	Equilibrium Partitioning
	Fresh water	9.303 µg/l	Assessment Factors
	Marine water	0.93 µg/l	Assessment Factors
	Sewage Treatment Plant	1 mg/l	Assessment Factors
	Fresh water	0.96 mg/l	Assessment Factors
	Marine water	0.79 mg/l	Assessment Factors
	Sewage Treatment Plant	580 mg/l	Assessment Factors
	Fresh water sediment	3.6 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	2.9 mg/kg dwt	Equilibrium Partitioning
bornan-2-one			
ALCOHOL			

8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

SECTION 8: Exposure controls/personal protection

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

- : EN 16523-1:2015
Tested for protection against chemical permeation.
Low chemical resistant or waterproof gloves.
(EN 16523-1:2015 supersedes EN 374-3:2003)
EN 374-2:2003
Tested for protection against liquid penetration and micro-organisms.
EN 388:2003
Tested for protection against mechanical risks (abrasion, blade cut resistance, tear resistance and puncture resistance).
ISO 374-1:2016/Type A
Protective glove with permeation resistance of at least 30 minutes each for at least 6 test chemicals.
ISO 374-1:2016/Type B
Protective glove with permeation resistance of at least 30 minutes each for at least 3 test chemicals.
ISO 374-1:2016/Type C
Protective glove with permeation resistance of at least 10 minutes for at least 1 test chemical.
Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

- : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid. [Block (Caged)]

Color : Green.

Odor : Not available.

SECTION 9: Physical and chemical properties

Melting point/freezing point	: Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range	: Not relevant/applicable due to nature of the product.
Flammability (solid, gas)	: Not relevant/applicable due to nature of the product.
Upper/lower flammability or explosive limits	: Not relevant/applicable due to nature of the product.
Flash point	: Not relevant/applicable due to nature of the product.
Auto-ignition temperature	: Not relevant/applicable due to nature of the product.
Decomposition temperature	: Not relevant/applicable due to nature of the product.
pH	: 6 to 9 [Conc. (% w/w): 100%]
Viscosity	: Not relevant/applicable due to nature of the product.
Solubility(ies)	:

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Partition coefficient: n-octanol/ water	: Not relevant/applicable due to nature of the product.
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Vapor pressure	: Not relevant/applicable due to nature of the product.
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Vapor density	: Not relevant/applicable due to nature of the product.
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Particle characteristics

Median particle size	: Not relevant/applicable due to nature of the product.
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SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
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10.2 Chemical stability	: The product is stable.
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10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
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10.4 Conditions to avoid	: No specific data.
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10.5 Incompatible materials	: No specific data.
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10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
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SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium C10-13 Alkyl Benzenesulfonate	LD50 Oral	Rat	1080 mg/kg	-
SODIUM CARBONATE	LD50 Dermal	Mouse - Female	2210 mg/kg	-
LINALOOL	LD50 Oral	Rat	2800 mg/kg	-
	LD50 Dermal	Rabbit	5610 mg/kg	-
	LD50 Dermal	Rat	5610 mg/kg	-
	LD50 Oral	Rat	2790 mg/kg	-

SECTION 11: Toxicological information

CITRONELLOL	LD50 Dermal LD50 Oral	Rabbit Rat	2650 mg/kg 3450 mg/kg	-
D_LIMONENE	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg 4400 mg/kg	-
GERANIOL	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg 2.1 g/kg	-
LAURALDEHYDE	LD50 Oral	Rat	23 g/kg	-
DIPHENYL ETHER	LD50 Dermal LD50 Oral	Rabbit Rat	>7940 mg/kg 2450 mg/kg	-

Conclusion/Summary : Calculation method Harmful if swallowed.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Harpic Fresh Power 6 block (ITB) _FF3239068_D8396449 (EU)	1306.3	N/A	N/A	N/A	N/A
Sodium C10-13 Alkyl Benzenesulfonate	1080	N/A	N/A	N/A	N/A
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	500	N/A	N/A	N/A	N/A
SODIUM CARBONATE	2800	5000	N/A	N/A	N/A
LINALOOL	2790	5610	N/A	N/A	N/A
CITRONELLOL	3450	2650	N/A	N/A	N/A
D_LIMONENE	4400	N/A	N/A	N/A	N/A
GERANIOL	2100	N/A	N/A	N/A	N/A
LAURALDEHYDE	23000	N/A	N/A	N/A	N/A
DIMETHYLTETRAHYDRO BENZALDEHYDE	2500	2500	N/A	N/A	N/A
2,4-DIMETHYL-3-CYCLOHEXENE	2500	N/A	N/A	N/A	N/A
CARBOXALDEHYDE					
DIPHENYL ETHER	2450	N/A	N/A	N/A	N/A
DELTA-DAMASCONE	500	N/A	N/A	N/A	N/A
ROSE KETONE-4	N/A	2500	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sodium C10-13 Alkyl Benzenesulfonate	Eyes - Severe irritant	In vivo	-	-	-
SODIUM CARBONATE	Skin - Moderate irritant Eyes - Mild irritant	Rabbit Rabbit	- -	0.5 Milliliters 0.5 minutes 100 mg	-
LINALOOL	Eyes - Moderate irritant Eyes - Moderate irritant Skin - Mild irritant	Rabbit Rabbit Human	- - -	24 hours 100 mg 1 hours 0.1 MI 100 uL 72 hours 32 %	-
CITRONELLOL	Skin - Mild irritant Skin - Mild irritant Skin - Moderate irritant Skin - Severe irritant Eyes - Moderate irritant Skin - Moderate irritant Skin - Severe irritant	Man Rabbit Guinea pig Rabbit Rabbit Man Rabbit Guinea pig	- - - - - - - -	48 hours 16 mg 24 hours 500 mg 24 hours 100 mg 24 hours 100 mg 0.42 % 48 hours 16 mg 4 hours 0.42 % 24 hours 100 mg	-

SECTION 11: Toxicological information

D_LIMONENE	Skin - Severe irritant	Rabbit	-	mg 4 hours 0.5	-
	Skin - Severe irritant	Rabbit	-	MI 24 hours 100	-
GERANIOL	Skin - Mild irritant	Rabbit	-	mg 24 hours 10	-
	Skin - Mild irritant	Guinea pig	-	% 30 %	-
LAURALDEHYDE	Skin - Moderate irritant	Rabbit	-	4 hours 0.5	-
	Skin - Severe irritant	Guinea pig	-	MI 24 hours 100	-
DIPHENYL ETHER	Skin - Severe irritant	Human	-	mg 48 hours 32	-
	Skin - Severe irritant	Man	-	% 24 hours 16	-
DIPHENYL ETHER	Skin - Severe irritant	Rabbit	-	mg 24 hours 100	-
	Skin - Mild irritant	Human	-	mg 48 hours 5	-
DIPHENYL ETHER	Skin - Moderate irritant	Rabbit	-	mg 24 hours 500	-
	Skin - Mild irritant	Rabbit	-	mg 24 hours 500	-

Conclusion/Summary

Skin : Calculation method Causes skin irritation.
Eyes : Calculation method Causes serious eye damage.
Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Conclusion/Summary

Skin : Calculation method May cause an allergic skin reaction.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
D_LIMONENE	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

SECTION 11: Toxicological information

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Sodium C10-13 Alkyl Benzenesulfonate	Acute LC50 5 mg/l Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
SODIUM CARBONATE	Acute EC50 242000 µg/l Fresh water Acute LC50 176000 µg/l Fresh water Acute LC50 265000 µg/l Fresh water Acute LC50 300000 µg/l Fresh water	Algae - Navicula seminulum Crustaceans - Amphipoda Daphnia - Daphnia magna Fish - Lepomis macrochirus	96 hours 48 hours 48 hours 96 hours
LINALOOL	Acute EC50 36.7 ppm Fresh water	Daphnia - Daphnia magna	48 hours

SECTION 12: Ecological information

D_LIMONENE	Acute LC50 28.8 ppm Fresh water Acute EC50 421 µg/l Fresh water Acute EC50 688 µg/l Fresh water	Fish - Oncorhynchus mykiss Daphnia - Daphnia magna Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 48 hours 96 hours
DIPHENYL ETHER	Acute EC50 800 µg/l Marine water Acute LC50 670 µg/l Fresh water Acute LC50 1.7 mg/l Fresh water	Algae - Skeletonema costatum Daphnia - Daphnia magna Fish - Lepomis macrochirus	96 hours 48 hours 96 hours

Conclusion/Summary : Calculation method Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
LINALOOL	-	62.4 % - Readily - 28 days	-	-

Conclusion/Summary : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
LINALOOL	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Sodium C10-13 Alkyl Benzenesulfonate	3.32	-	low
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	-2.42	-	low
LINALOOL	2.84	-	low
CITRONELLOL	3.41	-	low
D_LIMONENE	4.38	-	high
GERANIOL	2.6	-	low
DIPHENYL ETHER	4.21	200	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: Yes.

European waste catalogue (EWC)

Waste code	Waste designation
20 01 29*	detergents containing hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : None.

on the manufacture,
placing on the market
and use of certain
dangerous substances,
mixtures and articles

Other EU regulations

Industrial emissions : Listed
(integrated pollution
prevention and control) -

Air

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

15.2 Chemical Safety Assessment

SECTION 16: Other information

► Indicates information that has changed from previously issued version.

Abbreviations and acronyms	ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

SECTION 16: Other information

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B

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