Date of revision 03.10.2012

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Domestos Citrus Fresh

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Domestos Citrus Fresh

Product code 8755365

Product description Hygienic cleaner for hard surfaces and toilettes

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

Industrial uses: Uses of substances as such or in preparations at industrial sites

Consumer uses: Private households (= general public = consumers)

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

1.3 Details of the supplier of the safety data sheet

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Unilever UK Limited

Springfield Drive Surrey, Leatherhead

UNITED KINGDOM

KT22 7GR

e-mail address of person responsible for this SDS unileversds@unileverconsumerlink.co.uk

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number Not applicable in United Kingdom and Ireland

Supplier

Telephone number 0800 776646/Eire 1850 388 399

Hours of operation -

2. Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification Xi, R36/38

Physical/chemical hazards Not applicable.

Human health hazards Irritating to eyes and skin.

Environmental hazards Not applicable.

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

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

2.2 Label elements

Hazard symbol or symbols

Indication of danger	Xi Irritant
Risk phrases	R36/38 - Irritating to eyes and skin.
Safety phrases	S2 - Keep out of the reach of children. S24/25 - Avoid contact with skin and eyes. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S46 - If swallowed, seek medical advice immediately and show this container or label. Warning! Do not use together with other products. May release dangerous gases (chlorine).
Supplemental label elements	Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings	Not applicable.
Tactile warning of danger	Not applicable.

2.3 Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	Not applicable.
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	Not applicable.
Other hazards which do not result in classification	Warning! Do not use together with other products. May release dangerous gases (chlorine).

3. Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Sodium Hypochlorite	RRN : 01-2119488154-34 EC:231-668-3 CAS : 7681-52-9 Index:	1 - 5	C; R34 R31 N; R50	Aquatic Acute, 1, H400 Skin Corr./Irrit., 1B, H314 EUH031, -, EUH031 Eye Dam./Irrit., 1, H318 Met. Corr., 1, H290	[1]
Cocamine Oxide	RRN : EC:263-016-9 CAS : 61788-90-7 Index:	1 - 5	Xi; R38R41 N; R50	Skin Corr./Irrit., 2, H315 Eye Dam./Irrit., 1, H318 Aquatic Acute, 1, H400	[1]
sodium hydroxide	RRN : 01-2119457892-27 EC:215-185-5 CAS : 1310-73-2 Index:011-002-00-6	0.1 - 1	C; R35	Skin Corr./Irrit., 1A, H314 Eye Dam./Irrit., 1, H318 Met. Corr., 1, H290	[1][2]
Cetrimonium Chloride	RRN : EC:203-928-6 CAS : 112-02-7 Index:	0.1 - 1	Xn; R22 C; R34 N; R50	Skin Corr./Irrit., 1B, H314 Aquatic Acute, 1, H400 Acute Tox., 4, H302 Eye Dam./Irrit., 1, H318	[1]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

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

Occupational exposure limits, if available, are listed in Section 8.For confidentiality reasons, the levels of components listed in Section 3 are given in percentage bands. The bandings do not reflect potential variation in composition of this formulation, but are used simply to mask the exact component levels, which we consider to be proprietary information. The classification given in Section 2 and 15 reflects the exact composition of this mixture.

* exempted according to REACH Art. 2(7) and Annex V; each starting material of the ionic mixture is registered, if required

4. First aid measures

4.1 Description of first aid measures

Eye contact

Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

Move exposed person to fresh air.

Keep person warm and at rest.

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.

If chlorine is released (following contact with acid) get medical attention immediately.

Oxygen may be administered if breathing is difficult.

Get medical attention if adverse health effects persist or are severe.

Skin contact

Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Get medical attention if symptoms occur.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink.

Do not induce vomiting unless directed to do so by medical personnel.

Get medical attention if adverse health effects persist or are severe.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact

Severely irritating to eyes. Risk of serious damage to eyes.

Inhalation

May cause irritation to the respiratory system.

Skin contact

Irritating to skin.

Ingestion

Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact

Adverse symptoms may include the following:

pain or irritation

watering

redness

Inhalation

Adverse symptoms may include the following:

respiratory tract irritation

Skin contact

Adverse symptoms may include the following:

irritation

redness

Ingestion

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

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

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

Decomposition products may include the following materials:

carbon monoxide

carbon dioxide

5.3 Advice for firefighters

Special precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. 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.

Additional information

Not available.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

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

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Conditions to avoid Materials to avoid

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Materials to avoid Conditions to avoid Avoid breathing vapor or mist. Manipulate in a well-ventilated area.

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.

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). Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

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. Separate from acids. 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. Materials to avoid

7.3 Specific end use(s)

Recommendations

Not available

Industrial sector specific solutions

Not available

8. Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Occupational exposure limits
sodium hydroxide	**EH40/2005 WELs (1997-01-01)** Short Term Exposure Limit (STEL) 2 mg/m3

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2 Exposure controls

Appropriate engineering controls

If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual protection measures

Hygiene measures

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. Industrial use Wear eye protection. Eye/Face Protection: Chemical splash goggles or face shield.

Skin protection

Hand protection

Wear suitable gloves.

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. For industrial

use, Wear suitable protective clothing. Avoid prolonged or repeated contact with skin.

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

A respirator is not needed under normal and intended conditions of product use. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Form	liquid
Color	Not available
Odor	perfumed
Odor threshold	Not available
pH	13
Melting point/freezing point	Not available.

Initial boiling point and boiling range	Not available.
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Density	1.077 g/cm3
Bulk density	Not available
Solubility in water at room temperature (g/l):	Not available
Upper/lower flammability or explosive limits	Lower: Not available. Upper: Not available.
Vapor pressure	Not available.
Vapor density	Not available
Relative density	Not available
Solubility(ies)	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Viscosity	Dynamic: 425 mPa.s Kinematic: Not available.
Explosive properties	Not available
Oxidizing properties	Not available

9.2 Other information

SADT	Not available
Type of aerosol	Not available
Heat of combustion	Not available.

10. Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	Warning! Do not use together with other products. May release dangerous gases (chlorine). Avoid release to the environment. Do not allow to enter surface water or drains undiluted or in large quantities.
10.5 Incompatible materials	Reactive or incompatible with the following materials: acids Flammable material combustible materials metals
10.6 Hazardous decomposition products	Contact with acids liberates toxic gas (chlorine)Contact with acids liberates toxic gas (chlorine)

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 21,900 mg/kg

Irritation/Corrosion

Eyes

The corrosivity potential of this extreme pH mixture has been assessed using test data on similar mixtures and/or market experience (for example, in cases of accidental exposure). These data indicate this mixture will cause irritation and not corrosion.

Skin

The corrosivity potential of this extreme pH mixture has been assessed using test data on similar mixtures and/or market experience (for example, in cases of accidental exposure). These data indicate this mixture will cause irritation and not corrosion.

Sensitization

No sensitization studies have been performed on the mixture. Based on the composition as indicated in section 3, it's not likely that the mixture will cause sensitisation by skin contact

Respiratory

No inhalation irritancy studies have been performed on the mixture. Based on the composition as indicated in section 3, it is not likely that this mixture will cause irritation of the respiratory tract.

Repeated dose toxicity

Not available

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Toxicity for reproduction

No known significant effects or critical hazards.

12: Ecological information

12.1 Toxicity

Not considered to be toxic to aquatic organisms based on results of the OECD 202 study of a framework mixture performed by the AISE.

Mixture / **Substance**:

Similar mixtures containing 5% sodium hypochlorite.

EC50 (Daphnia): 0.049 mg/l

12.2 Persistence and degradability

The surfactants used in this mixture are readily biodegradable.

The surfactant(s) contained in this mixture 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.

12.3 Bioaccumulative potential

Not considered to be bioaccumulating in the environment

BCF

12.4 Mobility in soil

Mixture is highly soluble

12.5 Results of PBT and vPvB assessment

No known significant effects or critical hazards.

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. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Large volumes may affect the acidity / alkalinity (pH) in water with risk of harmful effects on aquatic organisms.

Hazardous waste

The classification of the product may meet the criteria for a hazardous waste.

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.

14. Transport information

	ADR/RID	ADN/ADNR	IMDG
14.1 UN number	3266	3266	3266
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S.	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S.	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S.
14.3 Transport hazard class(es)	Class 8	Class 8	Class 8
14.4 Packing group	III	III	III
14.5. Environmental hazards	Yes.	Yes.	Yes.
14.6 Special precautions for user	Not available	Not available	Not available
Additional information	Tunnel code S-D Restriction code (E)S-D Restriction code		

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

Not available.

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

Substances of very high concern

Carcinogen: None of the components are listed.

Mutagen: None of the components are listed.

Toxic to reproduction: None of the components are listed.

PBT: None of the components are listed.

vPvB: None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Europe inventory

All components are listed or exempted.

Integrated pollution prevention and control list (IPPC) - Air–

Not listed

Integrated pollution prevention and control list (IPPC) - Water–

Not listed

Aerosol dispensers Not applicable.

National regulations

Remark This product has been classified in accordance with Dangerous Preparations Directive (1999/45/EC as amended).

International regulations

15.2 Chemical Safety Assessment This product contains substances for which Chemical Safety Assessments are still required.

16. Other information

Abbreviations and acronyms ATE = Acute Toxicity Estimate

CLP = Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

Key literature The acute toxicity (LD50) of this mixture, as given in section 11, has been

references and sources for data	calculated using the Proportionality Method (Holland, G.H. (1994). Verification of a Mathematical Method for the Estimation of the Acute Ingestion Hazard of Detergent Preparations. Toxic in Vitro, Vol. 8 No. 6 pp1177 – 1183, Elsevier Science Limited, Wielka Brytania.)The corrosivity potential of this extreme pH mixture has been assessed using test data on similar mixtures and/or market experience (for example, in cases of accidental exposure). These data indicate this mixture will cause irritation and not corrosion.
Full text of abbreviated H statements	H400 Very toxic to aquatic life. H318 Causes serious eye damage. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H314 Causes severe skin burns and eye damage.
Full text of classifications [CLP/GHS]	**Aquatic Acute 1, H400:** AQUATIC TOXICITY (ACUTE) - Category 1 **Eye Dam. /Irrit. 1, H318:** SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 **Met. Corr. 1, H290:** CORROSIVE TO METALS - Category 1 **Skin Corr. /Irrit. 1A, H314:** SKIN CORROSION/IRRITATION - Category 1A **Skin Corr. /Irrit. 1B, H314:** SKIN CORROSION/IRRITATION - Category 1B
Full text of abbreviated R phrases	R22- Harmful if swallowed. R34- Causes burns. R35- Causes severe burns. R41- Risk of serious damage to eyes. R38- Irritating to skin. R50- Very toxic to aquatic organisms.
Full text of classifications [DSD/DPD]	C - Corrosive Xn - Harmful

Xi - Irritant

N - Dangerous for the environment.

Date of printing 03.10.2012

Date of issue Date of revision 03.10.2012

Date of previous issue 09.05.2011

Reason:

Version 01

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