


Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

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

1.1 Product identifier	
Product Name	SAFE4 DISINFECTANT
Product code(s)	HC1025
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified Use(s)	Water based disinfectant and cleaner.
Uses Advised Against	None known.
1.3 Details of the supplier of the safety data sheet	
Company Identification	Safe Solutions (Safe4 Ltd) Safe Solutions (Safe4) Ltd. Bostock Road Winsford Cheshire CW7 3BD United Kingdom
Telephone	01606 591900
Fax	0845 006 2021
E-Mail (competent person)	info@safe4disinfectant.com
1.4 Emergency telephone number	+44 (0) 01606 591900
Languages spoken	09:00 – 17:00 (GMT) English, French

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Regulation (EC) No. 1272/2008 (CLP)	Eye Dam. 1; H318 Skin Irrit. 2; H315
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC	Xi; R41: Risk of serious damage to eyes. Xi; R38: Irritating to skin.
2.2 Label elements	
Product Name	SAFE4 DISINFECTANT
Contains:	Benzalkonium Chloride, Alkylethoxylate, Ethylene diamine tetraacetic acid
Hazard Pictogram(s)	
Signal Word(s)	DANGER
Hazard Statement(s)	H318: Causes serious eye damage. H315: Causes skin irritation. EUH208: Contains: Polyamino Hydrochloride May produce an allergic reaction.
Precautionary Statement(s)	P280: Wear protective gloves/protective clothing/eye protection/face 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. P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P310: Immediately call a POISON CENTER/doctor.

SAFETY DATA SHEET

SAFE SOLUTIONS (SAFE4) LTD

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P405: Store locked up.

Detergent liquids Label elements (648/2004)

SAFE4 DISINFECTANT Contains:
Non-ionic surfactants - 5 % or over but less than 15 %
Cationic surfactants - less than 5 %
Disinfectants: Ethylene diamine tetraacetic acid and Polyamino Hydrochloride

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable, Substances in preparations /mixtures

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Benzalkonium Chloride	3 - <5	68424-85-1	-	-	Acute Tox. 4; H302 Skin Corr. 1B; H314 Acute Tox. 4; H312 Aquatic Acute 1; H400
Polyamino Hydrochloride (20% active)	< 1	1802181-67-4	-	-	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Dam. 1; H318 Aquatic Acute 1; H400
Alkylethoxylate	3 - 7	68439-45-2	-	-	Acute Tox. 4; H302 Eye Dam. 1; H318
Dipropylene glycol monomethylether	1 - 5	34590-94-8	252-104-2	-	Not classified
Ethylene diamine tetraacetic acid (40% active)	1 - 5	111-42-2	203-868-0	-	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Chronic 3; H412
Citric acid	< 0.5	77-92-9	201-069-1	-	Eye Irrit. 2; H319
Apple FAF229	< 0.5	Mixture	Mixture	-	Not classified
Hexacol Blue/Green – 77590	< 0.5	Mixture	Mixture	-	Not classified
Water	>75			-	Not classified

Directive 67/548/EEC & Directive 1999/45/EC

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases Hazard Statement(s)
Benzalkonium Chloride	3 - <5	68424-85-1	-	-	Xn; R21/22: Harmful in contact with skin and if swallowed. C; R34: Causes burns. N; R50: Very toxic to aquatic organisms.
Polyamino Hydrochloride (20% active)	< 1	1802181-67-4	-	-	Xn; R22: Harmful if swallowed. R43: May cause sensitization by skin contact. Xi; R41: Risk of serious damage to eyes. N; R50: Very toxic to aquatic organisms.
Alkylethoxylate	3 - 7	68439-45-2	-	-	Xn; R22: Harmful if swallowed. Xi; R41: Risk of serious damage to eyes.
Dipropylene glycol monomethylether	1 - 5	34590-94-8	252-104-2	-	Not classified
Ethylene diamine tetraacetic acid (40% active)	1 - 5	111-42-2	203-868-0	-	Xn; R22: Harmful if swallowed. Xi; R38: Irritating to skin.

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

					Xi; R41: Risk of serious damage to eyes. Xn; R48/20/21/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Citric acid	< 0.5	77-92-9	201-069-1	-	Xi; R38: Irritating to skin.
Perfume - FAF229	< 0.5	Mixture	Mixture	-	Not classified
Hexacol – 77590	< 0.5	Mixture	Mixture	-	Not classified
Water	>75	Mixture	Mixture	-	Not classified

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. After contact with skin, wash immediately with plenty of water. Get medical attention immediately. Wash contaminated clothing before reuse.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical attention immediately. Give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe burns to skin, eyes, respiratory system and gastrointestinal tract.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. IF IN EYES: Obtain prompt consultation, preferably from an ophthalmologist. Chemical eye burns may require extended irrigation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Product as supplied: Does not support combustion. In case of fire, use water spray, foam, dry powder or CO2 for extinction.

Unsuitable extinguishing Media

Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Combustion may cause toxic fumes.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin and eyes. Wear appropriate personal protective equipment, avoid direct contact.

6.2 Environmental precautions

Avoid release to the environment. Do not release undiluted and unneutralised to the sewer. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning

Cover spills with inert absorbent material. Transfer to a lidded container for

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

up disposal or recovery. Dispose of waste according to applicable legislation. Flush spill area with copious amounts of water.
6.4 Reference to other sections See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid all contact. Good hygiene practices and housekeeping measures. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities Keep only in original container. Keep container tightly closed and in a well-ventilated place. Provide bunding to hold 110% of the largest container's volume.

Storage temperature Store at room temperature. Do not freeze.
Storage life Stable at ambient temperatures.
Incompatible materials Acids. Keep away from oxidising agents.

7.3 Specific end use(s) See Also Section: 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWAppm)	LTEL (8 hr TWAmg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Dipropylene glycol monomethylether	34590-94-8	50	308	-	-	WEL, Sk

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

Sk - Can be absorbed through skin.

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)

Assumes a good basic standard of occupational hygiene is implemented.

Eye/face protection

Use eye protection according to EN 166, designed to protect against liquid splashes.



Skin protection

Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

Respiratory protection is not necessary if room is well ventilated. In case of inadequate ventilation wear respiratory protection.



Thermal hazards

Not applicable

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	(Substances in preparations / mixtures)
	Appearance	Liquid Green/Blue/Purple/Clear
	Odour	Apple/Mint/Lavender/Odourless
	Odour Threshold	Not determined
	pH	7 - 8
	Melting Point/Freezing Point	0 °C
	Initial boiling point and boiling range	100 – 195 °C
	Flash Point	> 75 °C
	Evaporation Rate	Not determined
	Flammability (solid, gas)	Not applicable (Liquid)
	Upper/lower flammability or explosive limits	Not applicable (Liquid)
	Vapour pressure	Not determined
	Vapour density	Not determined
	Relative density	1.010
	Solubility(ies)	Soluble in water.
	Partition coefficient: n-octanol/water	Not established.
	Auto-ignition temperature	> 210 °C
	Decomposition Temperature	Not established.
	Viscosity	Low Viscosity
	Explosive properties	Not explosive.
	Oxidising properties	Not oxidising.
9.2	Other information	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	None known.
10.4	Conditions to avoid	Elevated temperature. Do not allow material to freeze.
10.5	Incompatible materials	Acids. Keep away from oxidising agents.
10.6	Hazardous decomposition product(s)	Combustion may cause toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects (Substances in preparations / mixtures)	
	Acute toxicity	
	Ingestion	Not classified. Acute Toxicity Estimate Mixture Calculation: > 3100 mg/kg Body weight
	Inhalation	LD50 (rat) 2000 mg/kg (Alcohol Ehoxylate)
	Skin Contact	Not classified
	Skin corrosion/irritation	Eye Dam. 1; Causes severe damage to eyes. (Alcohol Ehoxylate, Benzalkonium Chloride)
	Serious eye damage/irritation	Skin Irrit. 2; Causes skin irritation. (Mixture)
	Respiratory or skin sensitization	Contains: Polyamino Hydrochloride. May produce an allergic reaction in persons already sensitised.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT - single exposure	Not classified
	STOT - repeated exposure	Not classified
	Aspiration hazard	Not classified
11.2	Other information	None

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010(REACH)

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Not classified (Mixture) Polyamino Hydrochloride: EC50/ 48h 0.2 mg/l (Daphnia magna) EC50/ 72h 0.1 mg/l (Selenastrum Capricornutum) LC50/ 96h 0.13 mg/l (Rainbow trout)
12.2	Persistence and degradability	The product is readily biodegradable.
12.3	Bioaccumulative potential	The substance has no potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have high mobility in soil. (Soluble in water.)
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of contents in accordance with local, state or national legislation. Do not release undiluted and unneutralised to the sewer. Before discharge into sewage plants the product normally needs to be neutralised. (Toxic to sewage micro-organisms.)
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SECTION 14: TRANSPORT INFORMATION

	Not classified as dangerous for transport.			
		ADR/RID	IMDG	IATA/ICAO
14.1	UN number	None assigned		
14.2	Proper Shipping Name	None assigned		
14.3	Transport hazard class(es)	None assigned		
14.4	Packing group	None assigned		
14.5	Environmental hazards	Not classified.	Not classified as a Marine Pollutant.	Not classified.
14.6	Special precautions for user	See Section: 2		
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	Not applicable.	Not applicable.
14.8	Additional Information	Not applicable.		

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
	Authorisations and/or Restrictions On Use	None.
15.1.2	National regulations	None known.
15.2	Chemical Safety Assessment	None.

Version: 4.1 Date: 03.05.17

ACCORDING TO EC-REGULATIONS 528/2012 (BPR),
1272/2008 (CLP) & 453/2010 (REACH)

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Safety Data Sheets for ingoing ingredients: Mixture, Benzalkonium Chloride (CAS No. 68424-85-1), Polyamino Hydrochloride (CAS No. 1802181-67-4), Alkylethoxylate (CAS No. 68439-45-2). Existing ECHA registration(s) for, Dipropylene glycol monomethylether (CAS No. 3459948), Ethylene diamine tetraacetic acid (CAS No. 111-42-2), Citric acid (CAS No. 77-92-9).

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvT: very Persistent and very Toxic
OECD	Organisation for Economic Cooperation and Development

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP).	Classification Procedure
Eye Dam. 1; H318	Threshold Calculation
Skin Irrit. 2; H315	Threshold Calculation

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Contact manufacturer