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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.
		Wharton Green House
		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) 1606 866392
		09:00 – 17:00 (GMT), Monday - Friday
	Languages spoken	English, French
	ION 2: HAZARDS 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	According to Regulation (EC) No. 1272/2008 (CLP)
	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: Polyaminopropyl Biguanide. May produce an allergic
		reaction.
	Precautionary Statement(s)	P280: Wear protective gloves/protective clothing/eye protection/face protect

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.

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P310: Immediately call a POISON CENTER/doctor. 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 Polyaminopropyl Biguanide

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	%W/W	CAS No.	EC No.	REACH	Hazard Statement(s)
substance				Registration No.	
Benzalkonium Chloride	3 - <5	68424-85-1	-	-	Acute Tox. 4; H302
					Skin Corr. 1B; H314
					Acute Tox. 4; H312
					Aquatic Acute 1; H400
Polyaminopropyl Biguanide	< 1	27083-27-8	-		Acute Tox. 4; H302
(20% active)					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	1 - 5	111-42-2	203-868-0		Acute Tox. 4; H302
(40% active)					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	%W/W	CAS No.	EC No.	REACH	EC Classification and Risk
substance				Registration No.	PhrasesHazard 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.
Polyaminopropyl Biguanide	< 1	27083-27-8	-		Xn; R22: Harmful if swallowed.
(20% active)					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	1 - 5	34590-94-8	252-104-2		Not classified
monomethylether				-	
Ethylene diamine tetraacetic acid	1 - 5	111-42-2	203-868-0	-	Xn; R22: Harmful if swallowed.

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(40% active)					Xi; R38: Irritating to skin. 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.
Apple FAF229	< 0.5	Mixture	Mixture	-	Not classified
Hexacol Blue/Green – 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	Ensu
	emergency procedures	appro
6.2	Environmental precautions	Avoic

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

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6.3	Methods and material for containment and cleaning up	Cover spills with inert absorbent material. Transfer to a lidded container for 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			
SECTI	ON 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 TWA ppm)	LTEL (8 hr TWA mg/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

- 8.1.3 PNECs and DNELs
- 8.2 Exposure controls
- 8.2.1 Appropriate engineering controls
- 8.2.2 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection



Skin protection



Respiratory protection



Thermal hazards

8.2.3 Environmental Exposure Controls

Not established.

Not established.

Ensure adequate ventilation. Assumes a good basic standard of occupational hygiene is implemented.

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

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

Not applicable Avoid release to the environment.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties Appearance	Liquid Green/Blue/Purple/Clear
	Odour Odour	Apple/Mint/Lavender/Odourless
	Odour Threshold	Not determined
	рН	7 - 8
	Melting Point/Freezing Point	0° 0
	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 determinedgtgfgfgfgfgfgfgfgf
	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

9.2 Other information

SECTION 10: STABILITY AND REACTIVITY

Reactivity 10.1

- **Chemical stability** 10.2
- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid
- 10.5 Incompatible materials
- 10.6 Hazardous decomposition product(s)

Stable under normal conditions. Stable under normal conditions. None known. Elevated temperature. Do not allow material to freeze. Acids. Keep away from oxidising agents. Combustion may cause toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects (Substances in p Acute toxicity	preparations / mixtures)
	Ingestion	Not classified. Acute Toxicity Estimate Mixture Calculation: > 3100 mg/kg Body weight LD50 (rat) 2000 mg/kg (Alcohol Ehoxylate)
	Inhalation	Not classified
	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: Polyaminopropyl Biguanide. 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

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SECT	ION 12: ECOLOGICAL INFORMATION					
12.1 12.2 12.3 12.4 12.5 12.6	Toxicity Persistence and degradability Bioaccumulative potential Mobility in soil Results of PBT and VPVB assessment Other adverse effects	Not classified (Mixture) Polyaminopropyl Biguanide: EC50/ 48h 0.2 mg/l (Daphnia magna) EC50/ 72h 0.1 mg/l (Selenastrum Capricornutum) LC50/ 96h 0.13 mg/l (Rainbow trout) The product is readily biodegradable. The substance has no potential for bioaccumulation. The product is predicted to have high mobility in soil. (Soluble in water.) Not classified as PBT or vPvB. None known				
SECT	ION 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.)				
SECT	ION 14: TRANSPORT INFORMATION					
	Not classified as dangerous for transport.	ADR/RID	IMDG	ΙΑΤΑ/ΙΟΑΟ		
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.				
SECT	TION 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.				
15.1.2	Authorisations and/or Restrictions On Use	None. None known.				

15.1.2 National regulations 15.2 **Chemical Safety Assessment** None known. None.

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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), Polyaminopropyl Biguanide (20% active) (CAS No. 27083-27-8), Alkylethoxylate (CAS No. 68439-45-2). Existing ECHA registration(s) for, Dipropylene glycol monomethylether (CAS No. 34590-94-8), Ethylene diamine tetraacetic acid (40% active) (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)

Not available.