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HARMAN technology Ltd

SAFETY DATA SHEET

llfostop

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier	
Product name	llfostop
Product number	1893870
Internal identification	10021
Container size	500ml
1.2. Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	Developer Stop Solution
1.3. Details of the supplier of	the safety data sheet
Supplier	Distributors UK: HARMAN technology Ltd, Ilford Way, Mobberley, Cheshire, WA16 7JL, UK Tel: 01565 650000, Fax: 01565 872734. (http://www.harmantechnology.com) Australia: CR Kennedy & Co Pty Ltd, 663 Chapel Street, South Yarra, Victoria 3141, Australia. Tel: 03 9823 1555, Fax: 03 9827 7216
Contact person	UK: HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com Australia: Contact Distributor (http://www.crkennedy.com.au) Tel +61 (0)3 9823 1555
1.4. Emergency telephone nu	mber
Emergency telephone	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228
SECTION 2: Hazards identified	cation
SECTION 2: Hazards identified 2.1. Classification of the subs	
2.1. Classification of the subs Classification (EC 1272/2008	tance or mixture
2.1. Classification of the subs Classification (EC 1272/2008) Physical hazards	tance or mixture) Not Classified
2.1. Classification of the subs Classification (EC 1272/2008	<u>tance or mixture</u> <u>)</u> Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
2.1. Classification of the subs Classification (EC 1272/2008) Physical hazards	tance or mixture) Not Classified
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2.1. Classification of the subs Classification (EC 1272/2008) Physical hazards Health hazards Environmental hazards 2.2. Label elements	<u>tance or mixture</u> <u>)</u> Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Precautionary statements	P102 Keep out of reach of children.
,, ,	P280 Wear protective clothing, gloves, eye and face protection.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P337+P313 If eye irritation persists: Get medical advice/ attention.
	P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

None known.

3.2. Mixtures		
Citric Acid		10-309
CAS number: 77-92-9	EC number: 201-069-1	REACH registration number: 01- 2119457026-42-XXXX
Classification Eye Irrit. 2 - H319		
2-PHENOXYETHANOL		1-59
CAS number: 122-99-6	EC number: 204-589-7	
Classification		
Acute Tox. 4 - H302		
Eye Irrit. 2 - H319		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

	4.1. Description	of first aid measures	
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Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.	
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.	
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.	
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.	
4.2. Most important symptoms and effects, both acute and delayed		
Inhalation	No specific symptoms known.	
Ingestion	No specific symptoms known.	
Skin contact	Irritating to skin.	
Eye contact	Irritation of eyes and mucous membranes.	
4.3. Indication of any immediate medical attention and special treatment needed		
Notes for the doctor	No specific recommendations.	

SECTION 5: Firefighting meas	
5.1. Extinguishing media	5
Suitable extinguishing media	The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.
5.2. Special hazards arising fro	
Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Carbon. Sodium.
5.3. Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapours.
Special protective equipment for firefighters	Use protective equipment appropriate for surrounding materials. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.
SECTION 6: Accidental release	e measures
6.1. Personal precautions, pro	tective equipment and emergency procedures
Personal precautions	Avoid contact with skin and eyes. Provide adequate ventilation. For personal protection, see Section 8.
6.2. Environmental precaution	<u>s</u>
Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
6.3. Methods and material for	containment and cleaning up
Methods for cleaning up	Wear protective clothing, gloves, eye and face protection. Wipe up with an absorbent cloth and dispose of waste safely. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
6.4. Reference to other section	ns
Reference to other sections	For personal protection, see Section 8. For waste disposal, see section 13.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling
Usage precautions	Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Read and follow manufacturer's recommendations.
7.2. Conditions for safe storage, including any incompatibilities	
Storage precautions	Store in tightly-closed, original container. Storage advice to ensure the product remains in a useable condition throughout its specified shelf life: Store at temperatures above 0°C. Store at temperatures not exceeding 30°C.
Storage class	Chemical storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Citric Acid (CAS: 77-92-9)

Ingredient comm	nents No exposure limits known for ingredient(s).
PNEC	- Fresh water; 0.44 mg/l - marine water; 0.044 mg/l - STP; 1000 mg/l - Sediment (Freshwater); 34.6 mg/kg - Sediment (Marinewater); 3.46 mg/kg - Soil; 33.1 mg/kg
8.2. Exposure controls	
Protective equipment	
Appropriate engineering controls	Provide adequate ventilation. This product must not be handled in a confined space without adequate ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Hand protection	Use protective gloves.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Appearance	Clear liquid.	
Colour	Orange.	
Odour	Odourless. or No characteristic odour.	
рН	pH (concentrated solution): 2.1	
Initial boiling point and range	>100°C @ 760 mm Hg	
Relative density	1.13 @ 20°C	
Solubility(ies)	100% Soluble in water.	
9.2. Other information		
Other information	Not available.	
SECTION 10: Stability and reactivity		
10.1. Reactivity		
Reactivity	The following materials may react with the product: Strong alkalis. Strong oxidising agents.	
10.2. Chemical stability		
Stability	Stable under the prescribed storage conditions.	

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10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
10.4. Conditions to avoid	
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
10.5. Incompatible materials	
Materials to avoid	Strong alkalis. Strong oxidising agents. Avoid contact with other photographic solutions and/or cleaning compounds.
10.6. Hazardous decompositi	on products
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Carbon. Sodium.
SECTION 11: Toxicological ir	formation
11.1. Information on toxicolog	ical effects
Toxicological effects	This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components that comprise the mixture.
Acute toxicity - oral ATE oral (mg/kg)	33,783.78
Ingestion	No harmful effects expected from quantities likely to be ingested by accident. May cause discomfort if swallowed.
Skin contact	Irritating to skin.
Eye contact	Irritating to eyes.
Route of exposure	Skin and/or eye contact Ingestion.
Medical symptoms	Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes.
SECTION 12: Ecological info	mation
12.1. Toxicity	
Toxicity	The product is not expected to be hazardous to the environment.
12.2. Persistence and degrad	ability
Persistence and degradability	No data available.
12.3. Bioaccumulative potenti	al
Bioaccumulative potential	No data available on bioaccumulation.
12.4. Mobility in soil	
Mobility	The product is soluble in water.
12.5. Results of PBT and vPv	B assessment
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
12.6. Other adverse effects	

SECTION 13: Disposal considerations

13.1. Waste treatment m	ethods
Disposal methods	Used, diluted, and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pre-treated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to handled by a licensed hazardous waste contractor.
Waste class	090199
SECTION 14: Transport information	

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16
	December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Guidance

Workplace Exposure Limits EH40.

Worksafe Australia NOHSC 2012: Labelling of workplace substances. Australian Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). Australian Approved Criteria for Classifying Hazardous Substances (NOHSC 1008). Australian List of Designated Hazardous Substances (NOHSC 10005). Australian National Code of Practice for the Preparation of Material safety Data Sheets (NOHSC 2011)

15.2. Chemical safety assessment

See the appended document: Safe Use of Mixtures Information (SUMI)

SECTION 16: Other information

General information	HARMAN technology Ltd believe the information and recommendations contained herein are based on correct and factual data. However, no express or implied guarantee or warranty of any kind is made with respect to this information. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to ensure the proper use and disposal of this product and the health and safety of employees and customers.
Key literature references and sources for data	European Photographic Chemical Industry Code of Practice For Classification And Labelling
Issued by	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com
Revision date	24/06/2019
Revision	3
Supersedes date	25/08/2017
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.

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Safe Use of Mixtures Information (SUMI)

Automated Photoprocessing using Aqueous based Products

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions	Operational conditions		
Maximum duration	1 hour per day for delivery, storage, loading, cleaning and mixing operations.		
	4-8 hours per day for application.		
Frequency of exposure	240 days per year.		
Physical state	Aqueous solutions (aq).		
Process conditions	Covers use at ambient temperatures.		
	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).		
	Keep emissions below the occupational exposure limits of the ingredients		
	specified in section 8 of the SDS.		
	Avoid direct contact.		
	Regular cleaning of equipment and work area.		
	Supervision in place to check that Risk Management Measures (RMM's) are in place and		
	are being correctly used and Operational Conditions (OC's) followed.		
Risk management measures			
Conditions and measures	Delivery & storage: Wear suitable gloves and labcoat.		
related to	Application: Wear labcoat and if there is a chance of exposure wear suitable eye		
Personal Protection Equipment	protection and suitable gloves.		
(PPE), hygiene and health evaluation	Loading/Cleaning/ Mixing: Wear suitable eye protection with side shield, suitable gloves		
	and labcoat.		
	Wear appropriate chemical resistant gloves: see Section 8 of the SDS.		
	No respiratory protective equipment should be required under normal conditions of use		
	provided that adequate ventilation is in place.		
	Eye wash station and emergency showers are recommended.		
	Avoid breathing mist/vapours.		
	Avoid contact with skin, eyes and clothing.		
	Training of workers in relation to proper use and maintenance of all Personal Protective		
	Equipment must be ensured.		
Good practice advice			
Use personal protective equipme	nt as required.		
Wash hands before breaks and a	fter work.		
Keep good industrial hygiene and	safety practice.		
Use only with adequate ventilation			

Do not eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

Store at room temperature.

Environmental measures

Do not allow this material to drain into sewers/water supplies.

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Ensure collection and disposal with appropriately licenced waste contractor.

Do not dispose of together with general office waste.

Use descriptors

IS- Use at industrial sites.

PW-Widespread use by professional workers.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with

equivalent containment conditions.

PROC2-Chemical production or refinery in closed continuous process with occasional

controlled exposure or processes with equivalent containment conditions.

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional

controlled exposure or processes with equivalent containment condition.

PROC5- Mixing and blending in batch processes.

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities.

PROC13-Treatment of articles by dipping and pouring.

ERC6b-Use of reactive processing aid at industrial site (no inclusion into or onto article).

ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.

All ingredients contributing to the classification are stated in Section 3 of the SDS.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.

Note that this will be usually the concentrate needed to create the working strength (WS) solution. In some cases the product will be RTU (Ready to Use) and will not require diluting. Hence there is a need to estimate the WS composition on a cases by case basis.

Mixing aqueous solutions creates a slightly different risk management method than mixing powders as the latter is normally done by operators wearing respirators suitable for the particle size and hazard posed by the substance(s).

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Safe Use of Mixtures Information (SUMI)

Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Professional Use)

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions			
Maximum duration	1 hour per day for diluting liquid concentrate	s or dissolving powders (when applicable).	
	1 hour per day for mixing and disposal activit	ies.	
	6 hours per day for application (= processing)	l.	
Frequency of exposure	Dissolving powders: 25 days per year.		
	Diluting liquids and all other activities: 50 day	vs per year.	
Physical state	As supplied: liquid concentrates or powder co	oncentrates.	
	As used, after making up: aqueous working so	olution.	
Process conditions	Covers use at ambient temperatures.		
	Provide a good standard of controlled ventila	tion (10 to 15 air changes per hour).	
	Keep emissions below the occupational expo	sure limits of the ingredients	
	specified in section 8 of the SDS.	-	
	Avoid direct contact.		
	Regular cleaning of equipment and work area	Э.	
Risk management measures			
Conditions and measures	Wear safety glasses with side shields.		
related to	Wear appropriate chemical resistant gloves: see section 8 of the SDS.		
Personal Protection Equipment	Wear lab coat or overall.		
(PPE), hygiene and health	No respiratory protective equipment is required under normal conditions of use, provided		
evaluation	that adequate ventilation is in place.		
	Eye wash station and emergency showers are	e recommended.	
	Avoid breathing dust (when handling powder	rs), mist/vapours.	
	Avoid contact with skin, eyes and clothing.		
	Training of worker in relation to proper use a	nd maintenance of the PPE must be ensured.	
Good practice advice			
Use personal protective equipme	ent as required.		
Wash hands before breaks and a	fter work.		
Keep good hygiene and safety practice.			
Use only with adequate ventilation.			
Do not eat, drink or smoke when	using this product.		

Environmental measures

Do not allow this material to drain into sewers/water supplies.

Ensure collection and disposal with appropriately licenced waste contractor.

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Use descriptors

PW-Widespread use by professional workers.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC5-Mixing or blending in batch processes.

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities.

PROC13-Treatment of articles by dipping and pouring.

ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor).

ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided.

See section 3 of the SDS for information on the product's composition. Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.

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Safe Use of Mixtures Information (SUMI)

Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Consumer Use)

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions		
Maximum duration	15 minutes per day for dissolving powders (when applicable).	
	15 minutes per day for mixing and disposal activities.	
	4 hours per day for application (= processing).	
Frequency of exposure	Dissolving powders: 12 days per year.	
	Diluting liquids and all other activities: 25 days per year.	
Physical state	As supplied: liquid concentrate or powder concentrate.	
	As used, after making up: aqueous working strength solution.	
Process conditions	Covers use at ambient temperatures.	
	Provide a good standard of ventilation.	
	Avoid direct contact.	
	Regular cleaning of equipment and work area.	
Risk management measures		
Conditions and measures	Wear safety glasses with side shields.	
related to	Wear appropriate chemical resistant gloves: see section 8 of the SDS.	
Personal Protection Equipment	Wear lab coat or overall.	
(PPE), hygiene and health	Provide adequate ventilation.	
evaluation	Avoid breathing dust (when handling powders), mist/vapours.	
	Avoid contact with skin, eyes and clothing.	
Good practice advice		
Use Personal Protective Equipme		
Wash hands before breaks and after work.		
Use only with adequate ventilation.		
Do not eat, drink or smoke when using this product.		
Environmental measures		
Do not allow this material to drain	n into sewers/water supplies.	
Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.		

Use descriptors

C-Consumer use.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC5-Mixing or blending in batch processes.

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC13-Treatment of articles by dipping and pouring.

ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor).

ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided.

See section 3 of the SDS for information on the product's composition.

Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people. Section 2 of the SDS states these ingredients where applicable.