

SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

1.1 Product identifier

Product name: Limelite
Product No.0016139593

UFI: TMRM-D6HH-VN0M-UF16

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

Identified uses: For removal of limescale from fittings and appliances

Uses advised against: Do not mix with other household chemicals such as chlorine bleach containing compounds.

1.3 Details of the supplier of the safety data sheet

Manufacturer

McBride Plc MIDDLETON
Middleton Way, Middleton
M24 4DP MANCHESTER
UK

Telephone: + 44 (0) 161 653 9037

Website: <http://www.detergentinfo.com>

E-mail: product.legislation@mcbride.eu

Supplier

McBride Plc MIDDLETON
Middleton Way, Middleton
M24 4DP MANCHESTER
UK

Telephone: + 44 (0) 161 653 9037

1.4 Emergency telephone number: UK + 44 (0) 161 653 9037, ROI 01 809 2166 8am-10pm 7 days a week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Health Hazards

Serious eye irritation

Category 2

H319: Causes serious eye irritation.

2.2 Label Elements



Signal Word: Warning

Hazard Statement(s): H319: Causes serious eye irritation.

Precautionary Statements

General: P101: If medical advice is needed, have product container or label at hand.
 P102: Keep out of reach of children.

Prevention: P260: Do not breathe mist.
 P264: Wash hands thoroughly after handling.

Response: 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.

2.3 Other hazards

PBT/vPvB data

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
FORMIC ACID	1 - <2%	64-18-6		01-2119491174-37;	No data available.	#
CITRIC ACID	1 - <5%	77-92-9	201-069-1	01-2119457026-42;	No data available.	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
FORMIC ACID	Classification: Flam. Liq.: 3: H226; Acute Tox.: 3: H331; Eye Dam.: 1: H318; Acute Tox.: 4: H302; Skin Corr.: 1A: H314; Skin Corr.: 1A: H314;	Note B

	Supplemental label information: None known.	
CITRIC ACID	Classification: Eye Irrit.: 2A: H319; STOT SE: 3: H335; Supplemental label information: None known.	None.

CLP: Regulation No. 1272/2008.
 The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Move to fresh air.
Skin Contact:	Flush skin thoroughly with water.
Eye contact:	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation persists after washing.
Ingestion:	Rinse mouth thoroughly. Do NOT induce vomiting. Seek medical attention.
Personal Protection for First-aid Responders:	No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	Mildly irritating to skin with prolonged exposure. Causes serious eye irritation.
Hazards:	No special precautionary health measures should be needed under anticipated conditions of use.

4.3 Indication of immediate medical attention and special treatment needed

Treatment:	Get medical attention if symptoms occur.
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SECTION 5: Firefighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
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5.1 Extinguishing media

Suitable extinguishing media:	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture:

During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire-fighting procedures:	Wear self-contained breathing apparatus and protective clothing.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Avoid contact with eyes and prolonged or repeated contact with skin.
6.1.1 For non-emergency personnel:	See Section 8 of the SDS for Personal Protective Equipment.
6.1.2 For emergency responders:	No data available.
6.2 Environmental Precautions:	Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.
6.3 Methods and material for containment and cleaning up:	Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.
6.4 Reference to other sections:	No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	Provide adequate ventilation. Avoid contact with eyes. Avoid contact with skin. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Use only as directed.
Contact avoidance measures:	No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions:	Store away from incompatible materials. Store in original tightly closed container.
Safe packaging materials:	No data available.

7.3 Specific end use(s):	For cleaning hard surfaces
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SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
FORMIC ACID	TWA		5.000000 ppm	9.600000 mg/m3	EH40 WEL (12 2011)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
FORMIC ACID	TWA		5.000000 ppm	9.600000 mg/m3	EH40 WEL (12 2011)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: If risk of splashing, wear safety goggles or face shield.

Hand Protection: Material: Use suitable protective gloves if risk of skin contact.

Skin and Body Protection: No data available.

Respiratory Protection: Not relevant, due to the form of the product.

Hygiene measures: Avoid contact with eyes. Avoid contact with skin. Wash hands thoroughly after handling.

Environmental Controls: No eSDS available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Colorless

Odor: green - marine

Odor Threshold: Odor perceived during normal use

Freezing point: < 0.00 °C

This property is not relevant for the safety and classification of this product

Boiling Point: > 70.00 °C

Flammability:	This property is not relevant for the safety and classification of this product
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	This property is not relevant for the safety and classification of this product
Explosive limit - lower:	This property is not relevant for the safety and classification of this product
Flash Point:	>93.00 °C
	Does not sustain combustibility based on test data.
Auto-ignition temperature:	This property is not relevant for the safety and classification of this product
Decomposition Temperature:	Not applicable, this property applies only to self-reactive mixtures
pH:	2.50
Viscosity	
Dynamic viscosity:	This property is not relevant for the safety and classification of this product
Kinematic viscosity:	No data available.
Solubility(ies)	
Solubility in Water:	The product is soluble in water.
Partition coefficient (n-octanol/water):	This property does not apply to mixtures
Vapor pressure:	This property is not relevant for the safety and classification of this product
Relative density:	1.0150
Density:	No data available.
Relative vapor density:	This property is not relevant for the safety and classification of this product

9.2 Other information

Explosive properties:	This property is not relevant for the safety and classification of this product Not classified
Autoignition Temperature:	This property is not relevant for the safety and classification of this product
Metal Corrosion:	>= 0.00 mm/a The physical-chemical properties of this material have not been fully investigated.
VOC Content:	EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17 19.49 g/l 1.95 % Method: calculated

SECTION 10: Stability and reactivity

10.1	Reactivity:	Stable under normal temperature conditions and recommended use.
10.2	Chemical Stability:	Material is stable under normal conditions.
10.3	Possibility of hazardous reactions:	None under normal conditions.
10.4	Conditions to avoid:	Avoid heat or contamination. Do not freeze.
10.5	Incompatible Materials:	Strong acids. Strong oxidizing substances. Strong bases.
10.6	Hazardous Decomposition Products:	By fire, toxic gases may be formed (CO _x , NO _x).

SECTION 11: Toxicological information

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

Inhalation:	None under normal conditions.
Skin Contact:	Mildly irritating to skin with prolonged exposure.
Eye contact:	Causes serious eye irritation.
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix, 37,584.310000 mg/kg
Components:	
FORMIC ACID	LD 50, Rat, 730.000000 mg/kg, 1 = reliable without restrictions, Experimental result, Key study Harmful if swallowed.
CITRIC ACID	Based on available data, the classification criteria are not met.

Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
FORMIC ACID	Based on available data, the classification criteria are not met.
CITRIC ACID	Based on available data, the classification criteria are not met.

Inhalation

Product:	ATEmix, 380.990000 mg/l, Vapour
Components:	
FORMIC ACID	LC 50, Rat, 4.00 h, 7.400000 mg/l, 1 = reliable without restrictions, Vapor, Experimental result, Key study Toxic if inhaled.
CITRIC ACID	Based on available data, the classification criteria are not met.

Repeated dose toxicity

Product:	Based on available data, the classification criteria are not met.
Components:	
FORMIC ACID	Based on available data, the classification criteria are not met.
CITRIC ACID	Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Causes severe skin burns and eye damage.
CITRIC ACID Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation

Product: Causes serious eye irritation.
Components:
FORMIC ACID Causes serious eye damage.
CITRIC ACID Draize, Rabbit, 14.00 d, Causes serious eye irritation.

Respiratory or Skin Sensitization

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

In vitro

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

In vivo

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure

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

Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Aspiration Hazard
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Other information
Product: No data available.

SECTION 12: Ecological information

12.1 Toxicity:

Acute hazards to the aquatic environment:

Fish
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Aquatic Invertebrates
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Toxicity to Aquatic Plants
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Toxicity to microorganisms
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Chronic hazards to the aquatic environment:

Fish
Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Aquatic Invertebrates

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

Toxicity to microorganisms

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

12.2 Persistence and Degradability

Biodegradation

Product: The surfactant(s) contained in this mixture comply with biodegradability criteria as laid down in regulations (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the member state. The other components of this mixture are either environmentally inert or absorbed onto sewage and sediment etc or will biodegrade to substances which are likely to be of low environmental impact when the mixture is used as directed.

Components:
FORMIC ACID No data available.
CITRIC ACID No data available.

12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: The product is not bioaccumulating.
Components:
FORMIC ACID No data available.
CITRIC ACID No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: , This property does not apply to mixtures
Components:
FORMIC ACID No data available.
CITRIC ACID No data available.

12.4 Mobility in soil:

Product: No data available.
Components:
FORMIC ACID No data available.
CITRIC ACID No data available.

12.5 Results of PBT and vPvB assessment:

Product: Based on available data, the classification criteria are not met.
Components:
FORMIC ACID Based on available data, the classification criteria are not met.
CITRIC ACID Based on available data, the classification criteria are not met.

12.6 Other adverse effects:

Other hazards
Product: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose of contents/container in accordance with local requirements for domestic waste disposal.

Disposal methods: Wash before disposal. Dispose to controlled facilities.

Contaminated Packaging: No data available.

European Waste Codes

Unused product: 20 01 29*: detergents containing hazardous substances

Used product: 15 01 10*: packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

ADR

14.1 UN number or ID number: Not regulated.
14.2 UN Proper Shipping Name: Not regulated.
14.3 Transport Hazard Class(es)
Class: Not regulated.
Label(s): Not regulated.
Hazard No. (ADR): Not regulated.
Tunnel restriction code: Not regulated.
14.4 Packing Group: Not regulated.
Limited quantity: Not regulated.
Excepted quantity: Not regulated.
14.5 Environmental Hazards: Not regulated.
14.6 Special precautions for user: Not regulated.

ADN

14.1 UN number or ID number: Not regulated.
14.2 UN Proper Shipping Name: Not regulated.
14.3 Transport Hazard Class(es)
Class: Not regulated.
Label(s): Not regulated.
Hazard No. (ADR): Not regulated.
Tunnel restriction code: Not regulated.
14.4 Packing Group: Not regulated.
Limited quantity: Not regulated.
Excepted quantity: Not regulated.
14.5 Special precautions for user: Not regulated.

RID

14.1 UN number or ID number: Not regulated.
14.2 UN Proper Shipping Name: Not regulated.

14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

IMDG

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
EmS No.:	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

IATA

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
Passenger and cargo aircraft :	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.
14.5 Environmental Hazards	
Environmentally Hazardous:	No
Marine Pollutant:	No

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

EU Regulations

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: None present or none present in regulated quantities.

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms:

EH40 WEL: UK. EH40 Workplace Exposure Limits (WELs), as amended
EH40 WEL / TWA: Time Weighted Average (TWA):

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Notes:

Note B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid...%'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
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Key literature references and sources for data: No data available.

Wording of the statements in section 2 and 3

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.

Training information: No data available.

Classification according to Regulation (EC) No 1272/2008 as amended.

Eye Irrit. 2, H319

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.