

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

1.1. Identification

Product name: MC40+ Cleaner and Descaler

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

Use of substance / mixture: Cleaning agent

1.3. Details of the supplier of the safety data sheet

Company name: ADEY Innovation Limited,
Head Office,
Gloucester Road,
Cheltenham,
GL51 8NR,
United Kingdom.

Tel: +44 (0)1242 546700

Fax: +44 (0)1242 546777

Email: info@adey.com

1.4. Emergency telephone number

Emergency tel: +44 (0)1242 546700 (8.30 – 5pm)
+44 (0)7909 967607 (outside office hours)

Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification under CLP: Eye Irrit. 2: H319

Most important adverse effects: Causes serious eye irritation.

2.2. Label elements

Label elements:

Hazard statements: H319: Causes serious eye irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



Precautionary statements: P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixture

Hazardous ingredients:

CITRIC ACID ANHYDROUS

EINECS	CAS	PBT / WEL	CLP Classification	Percent
201-069-1	77-92-9	-	Eye Irrit. 2: H319	70 – 90%

MALIC ACID

230-022-8	6915-15-7	-	Eye Irrit. 2: H319	10 – 30%
-----------	-----------	---	--------------------	----------

Section 4: First aid measures

4.1. Description of first aid measures

- Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
- Eye contact:** Bathe the eye with running water for 15 minutes. If eye irritation occurs or persists seek medical advice.
- Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

- Skin contact:** There may be irritation and redness at the site of contact.
- Eye contact:** There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.
- Ingestion:** There may be soreness and redness or the mouth and throat. Nausea and stomach pain may occur.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.
- Delayed/immediate effects:** Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate/special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel.
Do not attempt to take action without suitable protective clothing - see section 8 of SDS.
Do not create dust.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.
Avoid generating dusty conditions.

6.4. Reference to other sections

For further information, refer to section 8 and section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Avoid the formation of spread of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:
CITRIC ACID ANHYDROUS

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	-	10mg/m ³	4mg/m ³

8.2. Exposure controls

DNEL / PNEC: No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: With normal ventilation and usage, respiratory protection is not required below exposure

- limits. Do not create and breath dust. If ventilation is insufficient, suitable respiratory protection must be provided.
- Hand protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
- Eye protection:** Safety glasses with side-shields. Ensure eye bath is to hand.
- Skin protection:** Protective clothing.
- Environmental:** No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Powder	
Colour:	Pink/red	
Odour:	Characteristic odour	
Solubility(ies)	Readily soluble in hot and cold water	
Evaporation rate:	No data available	
Oxidising:	Non-oxidising (by EC criteria)	
Viscosity:	No data available	Melting point/range °C: 150
Boiling point/range °C:	No data available	
Flammability limits %:	Lower: Not applicable	Upper: Not applicable
Flash point °C:	Product does not sustain combustion	Part.coeff. n-octanol/water: No data available
Autoflammability °C:	Not applicable	Vapour pressure: No data available
Relative density:	1.8	pH: <2 [conc. (% w/w): 1.5%]
VOC g/l:	20% (w/w)	

9.2. Other information

No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. Decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:
CITRIC ACID ANHYDROUS

ORL	MUS	LC50	5040	mg/kg
ORL	RAT	LD50	3	g/kg
SCU	RAT	LD50	5500	mg/kg

MALIC ACID

IPR	PGN	LC50	100	mg/kg
ORL	MAN	LD50	1600	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness or the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed/immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical safety assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance of the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
This safety data sheet is prepared in accordance with Commission Regulation (EU) No 1272/2008.
This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and s.3: H319: Causes serious eye irritation.

Legal disclaimer: © ADEY Innovation Limited 2018. All rights reserved. You may use and make a reasonable number of copies of this document for your own internal business purposes only but not otherwise. The commission of any unauthorised act in relation to this document may result in civil or criminal actions being taken against you. We have taken reasonable steps to ensure that, to the best of our knowledge and belief, the information in this document is correct at the time of publication, but please be aware that it may over time become incorrect or out of date. Any hazards detailed herein may not be exclusive and others may exist. The Supplier excludes and disclaims, to the fullest extent allowed by law, any and all liability for the accuracy and/or completeness of the information contained herein and does not assume any such liability. It is the responsibility of the reader/user to assess the suitability of the product referred to for their purposes and to deal with the safe handling, transportation, use, storage and disposal of the same.

MC40+™

March 2018 Version 1.3
SAFETY DATA SHEET
MC40+ Cleaner and Descaler
Compilation date: 18/09/2015