CA Buster 25l

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

* **1.1. Product identifier**

Trade name/designation:

CA Buster 25l

Article No.:
T106025

UFI:
UV13-Y81Q-W91K-R9X3

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

Use of the substance/mixture:
Descaling products

Relevant identified uses:

	Process categories [PROC]
PROC 10:	Roller application or brushing
PROC 11:	Non industrial spraying

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals *(Met. Corr. 1)*	H290: May be corrosive to metals.	
Skin corrosion/irritation *(Skin Corr. 1)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	

* **2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS05
Corrosion

Signal word: Danger

Hazard components for labelling:
orthophosphoric acid

Hazard statements for physical hazards	
H290	May be corrosive to metals.

Hazard statements for health hazards	
H314	Causes severe skin burns and eye damage.

Supplemental hazard information: none

Precautionary statements Prevention	
P280	Wear protective gloves/protective clothing and eye protection/face protection.

Precautionary statements Response	
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER.

2.3. Other hazards

Other adverse effects:
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The inhalation of dust/mist or aerosols causes irritation of the respiratory tract.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 7664-38-2 EC No.: 231-633-2 Index No.: 015-011-00-6 REACH No.: 01-2119485924-24	**orthophosphoric acid** Acute Tox. 4 (H302), Eye Dam. 1 (H318), Met. Corr. 1 (H290), Skin Corr. 1B (H314) Danger **Specific concentration limit (SCL)** Skin Corr. 1B; H314: 25% ≤ C < 100% Skin Irrit. 2; H315: 10% ≤ C < 25% Eye Irrit. 2; H319: 10% ≤ C < 25% **Acute Toxicity Estimate** ATE (oral) 500 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) > 5 ppmV ATE (inhalation, vapour) ≥ 50 mg/L ATE (inhalation, dust/mist) > 5 mg/L	45 – < 50 weight-%
CAS No.: 77-92-9 EC No.: 201-069-1 Index No.: 607-750-00-3 REACH No.: 01-2119457026-42	**citric acid** Eye Irrit. 2 (H319), STOT SE 3 (H335) Warning **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, vapour) ≥ 50 mg/L ATE (inhalation, dust/mist) > 5 mg/L	1 – < 5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
Remove contaminated, saturated clothing immediately.

Following inhalation:
Provide fresh air.

In case of skin contact:
After contact with skin, wash immediately with plenty of water and soap.
Take off contaminated clothing and wash it before reuse.

After eye contact:
Rinse immediately carefully and thoroughly with eye-bath or water.

Following ingestion:
Rinse out mouth immediately and drink plenty of water.
Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
No data available

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

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water spray jet, alcohol resistant foam, Carbon dioxide, Powder

Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products:
Carbon dioxide, Carbon monoxide

5.3. Advice for firefighters
Co-ordinate fire-fighting measures to the fire surroundings.

5.4. Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Use personal protection equipment. Ventilate affected area.

6.1.2. For emergency responders
Personal protection equipment:
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up
For containment:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:
Treat the recovered material as prescribed in the section on waste disposal.

Other information:
Collect in closed and suitable containers for disposal.
Ventilate affected area.

6.4. Reference to other sections
See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

* **7.1. Precautions for safe handling**

Protective measures

Advices on safe handling:
Avoid contact with skin, eyes and clothes. Do not mix with other chemicals. Use personal protection equipment. Do not eat, drink or smoke when using this product. When using the HD method or spraying over large areas: Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. Absorb spillage to prevent material damage.

Fire prevent measures:
No special fire protection measures are necessary.

Advices on general occupational hygiene
Take off contaminated clothing. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:
Keep container tightly closed. Keep/Store only in original container.

Hints on storage assembly:
No special measures are necessary.

Storage class (TRGS 510, Germany): 8B – Non-combustible corrosive substances

7.3. Specific end use(s)

Recommendation:
Cleaning agent

GISCODE:
GS 80

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**orthophosphoric acid** CAS No.: 7664-38-2 EC No.: 231-633-2	② 2 mg/m³ ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**orthophosphoric acid** CAS No.: 7664-38-2 EC No.: 231-633-2	① 1 mg/m³ ② 2 mg/m³
MAK (AT)	**orthophosphoric acid** CAS No.: 7664-38-2 EC No.: 231-633-2	① 1 mg/m³

8.1.2. Biological limit values
No data available

8.1.3. DNEL-/PNEC-values
No data available

* **8.2. Exposure controls**

8.2.1. Appropriate engineering controls
No data available

8.2.2. Personal protection equipment



Eye/face protection:
Wear eye protection/face protection. (EN 166)

Skin protection:
Hand protection:
Wear protective gloves. (EN 374, Category III)
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
Suitable material: NBR (Nitrile rubber) Thickness of the glove material > 0,1 mm
Diluted application solutions <= 1%:
Protective gloves may be dispensed with, provided equivalent protective measures are taken, taking into account increased skin exposure due to wet work (e.g. use of suitable skin protection ointments).

Body protection:
Wear suitable work clothing.

Respiratory protection:
When using the HD method or spraying over large areas: combination filter A1/P2 (EN 143, EN 14387).

8.2.3. Environmental exposure controls
SECTION 6: Accidental release measures

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: dark red
Odour: Perfumes, fragrances
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	≈ 0.5	20 °C	
Melting point	≈ 0 °C		
Freezing point	≈ 0 °C		
Initial boiling point and boiling range	≈ 100 °C		
Flash point	*No data available*		
Evaporation rate	*No data available*		
Auto-ignition temperature	*not applicable*		
Upper/lower flammability or explosive limits	*not applicable*		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	1.33 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	completely miscible	20 °C	
Dynamic viscosity	< 10 mPa* s	25 °C	
Kinematic viscosity	*No data available*		

9.2. Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
Corrosive to metals.
Exothermic reaction with: Alkali (lye)

10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions
Corrosive to metals.
Exothermic reaction with: Alkali (lye)

10.4. Conditions to avoid
The product is stable under storage at normal ambient temperatures.

10.5. Incompatible materials
Corrosive to metals.
Alkali (lye)

10.6. Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

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

orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	
LD_{50} oral: 500 mg/kg (Ratte)	
LD_{50} dermal: >2,000 mg/kg (Ratte)	
LC_{50} Acute inhalation toxicity (gas): >5 ppmV	
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): >5 mg/L (Ratte)	
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	
LD_{50} oral: >2,000 mg/kg (Rat)	
LD_{50} dermal: >2,000 mg/kg (Rat)	
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): >5 mg/L 4 h (Rat)	

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Causes severe skin burns and eye damage.

Serious eye damage/irritation:
Causes serious eye damage.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

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

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

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

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

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

12.1. Toxicity

orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	
LC_{50}: 138 mg/L 4 d (fish, Gambusia affinis (Moskitofisch))	
EC_{50}: 100 mg/L 2 d (crustaceans, Daphnia magna (Großer Wasserfloh))	
EC_{50}: 100 mg/L 3 d (crustaceans, Daphnia)	
NOEC: 100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)	
NOEC: 56 mg/L 2 d (crustaceans, Daphnia)	
ErC_{50}: >100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)	
LC_{50}: 138 mg/L 4 d (fish, Gambusia affinis)	
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	
LC_{50}: 440 – 760 mg/L 2 d (fish)	
LC_{50}: 1,535 mg/L (crustaceans, Daphnia)	
EC_{50}: 160 mg/L 2 d (crustaceans)	
EC_{50}: 1,535 mg/L 1 d (crustaceans, Daphnia)	
NOEC: 425 mg/L (Algae/water plant, Scenedesmus quadricauda)	

Assessment/classification:
No further relevant information available.

12.2. Persistence and degradability

citric acid CAS No.: 77-92-9 EC No.: 201-069-1
Biodegradation: Yes, rapidly

Additional information:
The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3. Bioaccumulative potential

citric acid CAS No.: 77-92-9 EC No.: 201-069-1
Log K_{OW}: -1.57

Accumulation / Evaluation:
No indication of bioaccumulation potential. No further relevant information available.

12.4. Mobility in soil
The product has not been tested.

12.5. Results of PBT and vPvB assessment

orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2
Results of PBT and vPvB assessment: —
citric acid CAS No.: 77-92-9 EC No.: 201-069-1
Results of PBT and vPvB assessment: —

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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12.7. Other adverse effects
water hazard class 1: slightly hazardous to water

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV
Waste code product

06 01 04 *	phosphoric and phosphorous acid

**: Evidence for disposal must be provided.*

Waste code packaging

15 01 02	Plastic packaging

Waste treatment options
Appropriate disposal / Package:
Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1805	UN 1805	UN 1805	UN 1805
14.2. UN proper shipping name			
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
III	III	III	III
* **14.5. Environmental hazards**			
No	No	No	No
* **14.6. Special precautions for user**			
Limited quantity (LQ): 5 L **Excepted Quantities (EQ):** E 1 **Hazard identification number (Kemler No.):** 80 **Classification code:** C1 **Tunnel restriction code:** (E) **Remark:** Transport category 3	**Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E 1 **Classification code:** C1	**Special Provisions:** 223 **Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E 1 **EmS-No.:** F-A, S-B **Remark:** Segregation group 1 - acids	**Special Provisions:** A3 A803 **Limited quantity (LQ):** 1 L Y841 **Excepted Quantities (EQ):** E 1 **Remark:** IATA Packing Instructions - Passenger: 852 IATA Maximum Quantity - Passenger: 5 L IATA-Verpackungsanweisung - Cargo: 856 IATA Maximum Quantity - Cargo: 60 L

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Restrictions on use (REACH, Annex XVII) Entry 3, entry 75
Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: < 0,1 %
Regulation (EC) No. 648/2004 [Detergents regulation]

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

* **16.1. Indication of changes**

1.1.	Product identifier
2.2.	Label elements
3.2.	Mixtures
6.1.	Personal precautions, protective equipment and emergency procedures
7.1.	Precautions for safe handling
8.2.	Exposure controls
12.7.	Other adverse effects
14.5.	Environmental hazards
14.6.	Special precautions for user
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.3.	Additional information
16.1.	Indication of changes

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
EWC	European Waste Catalogue
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic

PC	Product category
PNEC	Predicted No Effect Concentration
PROC	Process Category
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals *(Met. Corr. 1)*	H290: May be corrosive to metals.	
Skin corrosion/irritation *(Skin Corr. 1)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.