

**Cleanolyte CE 3**

Material number 81.5403.1

Version 5 / Page 1 of 8

**SECTION 1: Identification of the substance/mixture  
and of the company/undertaking****1.1 Product identifier**

Trade name: Cleanolyte CE 3

**1.2 Relevant identified uses of the substance or mixture and uses advised against**General use: Cleaning agent for Refined steel  
For industrial purposes only**1.3 Details of the supplier of the safety data sheet**

Company name: Schilling Marking Systems GmbH

Street/POB-No.: In Grubenäcker 1

Postal Code, city: 78532 Tuttlingen

Germany

WWW: www.schilling-marking.de

E-mail: info@schilling-marking.de

Telephone: +49 (0)7461 9472-17

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Dept. responsible for information:

Herr Andreas Schilling,

Telephone: +49 (0)7461 9472-15, Email: info@schilling-marking.de

**1.4 Emergency telephone number****Beratungsstelle für Vergiftungserscheinungen, Berlin,  
Telephone: +49 (0)30 19240****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Xi; R36/37/38 Irritating to eyes, respiratory system and skin.

**2.2 Label elements****Labelling (67/548/EEC or 1999/45/EC)**

Xi

irritant

R phrase(s): R 36/37/38 Irritating to eyes, respiratory system and skin.

S phrase(s): S 23 Do not breathe vapour/aerosol.  
S 24/25 Avoid contact with skin and eyes.  
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Text for labelling: Contains anionic tenside < 5%.

### 2.3 Other hazards

A corrosive effect cannot be ruled out because of the pH value.  
Risk of serious damage to eyes.  
Cleaning work: Product may release corrosive gases/vapours.

## SECTION 3: Composition/ information on ingredients

3.1 Substances: not applicable

### 3.2 Mixtures

Chemical characterization (preparation):

A mixture of water, mineral acids and complexing agent

Hazardous ingredients:

Ingredient	Chemical name	Content	Classification
EINECS 231-595-7 CAS 7647-01-0	Hydrochloric acid	1-10 %	EU: C; R34. Xi; R37. CLP: Met. Corr. 1; H290. Skin Corr. 1B; H314. STOT SE 3; H335.
EINECS 231-633-2 CAS 7664-38-2	Phosphoric acid	5-10 %	EU: C; R34. CLP: Met. Corr. 1; H290. Skin Corr. 1B; H314.

Additional information: Labelling for contents according to regulation (EC) No 648/2004, annex 7:  
Contains anionic tenside < 5%.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: Remove contaminated clothing.

After inhalation: Provide fresh air. In case of respiratory difficulties seek medical attention.

In case of skin contact: Immediately clean with water and soap and, if available, apply a generous amount of polyethylene glycol 400. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth and drink large quantities of water.  
Do not induce vomiting. Risk of perforation! Immediately get medical attention.

### 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

Risk of foam aspiration when vomiting.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

**Cleanolyte CE 3**

Material number 81.5403.1

Version 5 / Page 3 of 8

**5.2 Special hazards arising from the substance or mixture**

On heating or in case of fire toxic gases may form.  
In the event of a fire, the following may be produced when the water evaporates:  
Phosphorus oxides, hydrochloric, chlorine.  
Hydrogen may form upon contact with metals (danger of explosion!).

**5.3 Advice for firefighters**

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Hazchem-Code: 2X

Use water spray jet to knock down vapours.

Do not allow fire water to penetrate into surface or ground water.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Provide good ventilation. Do not breathe vapour/aerosol.  
Avoid contact with the substance. Wear suitable protective clothing.

**6.2 Environmental precautions**

Do not allow to penetrate into soil, waterbodies or drains.

**6.3 Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. Use soda or another alkaline detergent for removal of residues.

**6.4 Reference to other sections**

Refer additionally to chapter 8 and 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advices on safe handling

Provide adequate ventilation, and local exhaust as needed.  
Do not breathe vapour/aerosol. Avoid contact with skin and eyes.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storerooms and containers:

Store containers tightly closed in a cool, dry, well ventilated area at temperatures not below 0°C °C. Protect from frost.

Unsuitable materials: metal

Storage class:

8B= Non-combustible corrosive substances

**7.3 Specific end use(s)**

Cleaning agent for Refined steel

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

CAS No.	Chemical name	Type	Limit value
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**Cleanolyte CE 3**

Material number 81.5403.1

Version 5 / Page 4 of 8

CAS No.	Chemical name	Type	Limit value
7647-01-0	Hydrochloric acid	Great Britain: WEL-TWA	(gas and aerosol mists) 2 mg/m <sup>3</sup> ; 1 ppm
		Great Britain: WEL-STEL	(gas and aerosol mists) 8 mg/m <sup>3</sup> ; 5 ppm
		Europe: IOELV: TWA	(Hydrogen chloride) 8 mg/m <sup>3</sup> ; 5 ppm
		Europe: IOELV: STEL	(Hydrogen chloride) 15 mg/m <sup>3</sup> ; 10 ppm
7664-38-2	Phosphoric acid	Great Britain: WEL-TWA	1 mg/m <sup>3</sup>
		Great Britain: WEL-STEL	2 mg/m <sup>3</sup>
		Europe: IOELV: TWA	1 mg/m <sup>3</sup>
		Europe: IOELV: STEL	2 mg/m <sup>3</sup>

**8.2 Exposure controls**

Provide good ventilation and/or an exhaust system in the work area.

**Occupational exposure controls**

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. Combination filter B-P2 according to EN 141.

Hand protection: Protective gloves according to EN 374.  
Glove material: Nitrile rubber-Layer thickness:  $\geq 0,35$  mm  
Possible alternatives: natural rubber, butyl caoutchouc (butyl rubber), fluoro rubber.  
Breakthrough time:  $> 480$  min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed safety glasses according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:  
Persons working with this product should not wear contact lenses.  
Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing. Do not breathe vapour/aerosol.  
Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	clear
Odour:	characteristic
Boiling temperature / boiling range:	approx. 100 °C
Melting point / melting range:	approx. 0 °C
Flash point / flash point range:	not combustible
pH value:	at 20 °C: 0,5-1,0
Water solubility:	at 20 °C: infinitely soluble

**9.2 Other information**

No data available

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Risk of corrosion

## Cleanolyte CE 3

Material number 81.5403.1

Version 5 / Page 5 of 8

### 10.2 Chemical stability

Product is stable under normal storage conditions.

### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

Hydrogen may form upon contact with metals (danger of explosion!).

### 10.4 Conditions to avoid

Protect from excessive heat.

### 10.5 Incompatible materials

Alkalis, aluminium, sulphuric acid, hydrides, aldehydes, sulfides fluorine, nitrates, carbides, cyanides, picrates, Metallic oxides, iron, steel, aluminium, ferruginous compounds

### 10.6 Hazardous decomposition products

On heating or in case of fire toxic gases may form.

In case of fire may be liberated: Phosphorus oxides, hydrochloric, chlorine.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Toxicological effects Acute toxicity (oral): Based on available data, the classification criteria are not met. Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irrit. 2; H315.

Eye damage / irritation: Eye Irrit. 2; H319.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): STOT SE 3; H335.

Specific target organ toxicity (repeated exposure): Lack of data.

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

Risk of foam aspiration when vomiting.

### General remarks

The following applies to hydrochloric acid in general:

LCLo human, oral: ca. 2,86 mg/kg (Hydrogen chloride).

LCLo human, inhalative: 3000 ppm/5 min (Hydrogen chloride).

The following applies to Phosphoric acid in general:

LD50 Rat, oral: 1530 mg/kg.

LC50 Rat, inhalative: >850 mg/m<sup>3</sup>

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: Harmful effects on water organisms by modification of pH-value.

Information about Phosphoric acid:  
Forms corrosive mixtures with water even if diluted.  
Fish toxicity: LC50 *Gambusia affinis*: 138 mg/l/96 h.

Water Hazard Class: 1 = slightly hazardous to water

Further details: The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

### 12.2. Persistence and degradability

Further details: No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

AOX reference: Product does not contain organically bound halogen (AOX).

General information: Do not allow to enter into ground-water, surface water or drains.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste key number 11 01 06\* = acids not otherwise specified  
\* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.

#### Contaminated packaging

Waste key number 15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.  
Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID, IMDG, IATA: 3264

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA: UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid and Phosphoric acid)

**Cleanolyte CE 3**

Material number 81.5403.1

Version 5 / Page 7 of 8

**14.3 Transport hazard class(es)**

ADR/RID: Class 8, Code: C1  
IMDG: Class 8, Code -  
IATA: Class 8

**14.4 Packing group**

ADR/RID, IMDG, IATA: III

**14.5 Environmental hazards**

Marine pollutant - IMDG: No

**14.6 Special precautions for user****Land transport (ADR/RID)**

Warning board: ADR/RID: Kemmler-number 80, UN number 3264  
Hazard label 8  
Special provisions 274  
Limited quantities 5 L  
EQ E1  
Contaminated packaging: Instructions P001 IBC03 LP01 R001  
Special provisions for packing together MP19  
Portable tanks: Instructions T7  
Portable tanks: Special provisions TP1 TP28  
Tank coding L4BN  
Tunnel restriction code: E

**Sea transport (IMDG)**

EmS: F-A, S-B  
Special provisions 223, 274  
Limited quantities 5 L  
EQ E1  
Contaminated packaging: Instructions P001, LP01  
Contaminated packaging: Provisions -  
IBC: Instructions IBC03  
IBC: Provisions -  
Tank instructions: IMO -  
Tank instructions: UN T7  
Tank instructions Provisions TP1, TP28  
Stowage and segregation Category A. Clear of living quarters.  
Properties and observations Causes burns to skin, eyes and mucous membranes.  
Segregation group 1

**Air transport (IATA)**

Hazard Corrosive  
EQ E1  
Passenger Ltd.Qty.: Pack.Instr. Y841 - Max.Qty. 1 L  
Passenger: Pack.Instr. 852 - Max.Qty. 5 L  
Cargo: Pack.Instr. 856 - Max.Qty. 60 L  
Special Provisioning A3 A803  
ERG 8L

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

**Cleanolyte CE 3**

Material number 81.5403.1

Version 5 / Page 8 of 8

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Great Britain**

Hazchem-Code: 2X

**National regulations - Germany**

Storage class: 8B= Non-combustible corrosive substances

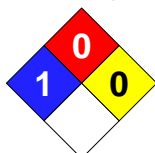
Water Hazard Class: 1 = slightly hazardous to water

Informations on working limitations:

Observe employment restrictions concerning young persons.

**National regulations - USA**

Hazard rating systems



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

**15.2 Chemical Safety Assessment**

No data available

**SECTION 16: Other information****Further remarks**

Wording of the R-phrases under paragraph 2 and 3:

R 34 = Causes burns.

R 36/37/38 = Irritating to eyes, respiratory system and skin.

R 37 = Irritating to respiratory system.

Reason of change: General revision

**Group that issues data sheet**

Contact person: see chapter 1, department responsible for information.

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.