

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 1 of 9

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

### 1.1. Product identifier

410 Rigorex

UFI: D5F0-P0NJ-F00D-YTJP

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

#### Use of the substance/mixture

Product for professional cleaning and maintenance

### 1.3. Details of the supplier of the safety data sheet

Company name: KAW KIEHL KG  
Street: Oskar-von-Miller-Str. 1  
Place: D-85235 Odelzhausen  
Telephone: +49 8134 9305-40      Telefax: +49 8134 5145  
e-mail: info@kiehl-group.com  
Contact person: Laboratory department  
Internet: www.kiehl-group.com  
Responsible Department: Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240  
Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43  
Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145  
Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59  
Numero d' emergenza Italia: Centro Antiveleni - 20162 Milano: 02/66101029  
ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest,  
Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199  
Emergency telephone number for all other countries: +49/8134/9305-169

KIEHL Austria GmbH	Perfektastr. 57;	A-1230 Wien	Tel. +43 (0) 1 / 604 99 93
KIEHL FRANCE S.A.R.L.	5, rue de Londres;	F-67670 Mommenheim	Tél. +33 (0) 3.88.59.52.25
KIEHL Italia s.r.l.	Via San Rocco, 101;	I-16036 Recco (GE)	Tel. +39 / 0185 730 008
KIEHL Schweiz AG	St. Dionys-Str. 33;	CH-8645 Jona	Tel. +41 (0) 55 / 254 74 74
KIEHL Hungary Kft.	Felsőipari körút 3/ D	HU-2142 Nagytarcsa	Tel. +36 (0) 1 / 348-08 41
KIEHL Middle East LLC	A8-LIU 48/49 - KIZAD	Abu Dhabi, U.A.E.	Tel. +971 2 550 33 96

**1.4. Emergency telephone number:** +49/89/19240 (germanophone and anglophone)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Skin Corr. 1B; H314

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

#### Hazard components for labelling

Phosphoric Acid

**Signal word:** Danger

**Pictograms:**



## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 2 of 9

#### Hazard statements

H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

#### 2.3. Other hazards

None known.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

according to 648/2004/CE: nonionic surfactants <5%, anionic surfactants <5%, inorganic acids, organic acids, water-soluble solvents, corrosion inhibitors

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7664-38-2	Phosphoric acid			25 - < 30 %
	231-633-2	015-011-00-6	02-2119752438-31	
	Skin Corr. 1B; H314			
68411-31-4	Dodecylbenzenesulfonate-triethanolamine			1 - < 5 %
	270-116-6			
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
144-62-7	Oxalic acid			1 - < 5 %
	205-634-3	607-006-00-8	01-2119534576-33	
	Acute Tox. 4, Acute Tox. 4; H312 H302			

Full text of H and EUH statements: see section 16.

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7664-38-2	231-633-2	Phosphoric acid	25 - < 30 %
		Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25	
144-62-7	205-634-3	Oxalic acid	1 - < 5 %
		dermal: ATE = 1100 mg/kg; oral: ATE = 500 mg/kg	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Avoid contact with skin and eyes.

##### After inhalation

not hazardous by inhalation

##### After contact with skin

Wash off immediately with soap and plenty of water. Take off all contaminated clothing immediately.

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 3 of 9

#### **After contact with eyes**

Rinse thoroughly with plenty of water, also under the eyelids.  
If eye irritation persists, consult a specialist.

#### **After ingestion**

Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible.  
Consult a physician.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

## SECTION 5: Firefighting measures

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Any extinguishing means and measures are acceptable.

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

This information is not available.

### **5.3. Advice for firefighters**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

## SECTION 6: Accidental release measures

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **General advice**

Avoid contact with skin, eyes and clothing.

#### **For non-emergency personnel**

Use personal protection equipment.

#### **For emergency responders**

Use personal protection equipment.

### **6.2. Environmental precautions**

Do not flush into surface water.

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

#### **For containment**

Stop leak if safe to do so. Cover drains.  
Prevent spread over a wide area (e.g. by containment or oil barriers).

#### **For cleaning up**

Wipe up with absorbent material (e.g. cloth, fleece).  
Clean contaminated articles and floor according to the environmental legislation.

#### **Other information**

Never return spills in original containers for re-use.

### **6.4. Reference to other sections**

Refer to protective measures listed in sections 7 and 8.

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Avoid contact with skin and eyes.

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 4 of 9

#### Advice on protection against fire and explosion

No special protective measures against fire required.

#### Advice on general occupational hygiene

General industrial hygiene practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Store at room temperature in the original container. Store in a place accessible by authorized persons only.

##### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Do not store together with alkalis

##### Further information on storage conditions

Keep container tightly closed.

Never return unused material to storage receptacle.

#### 7.3. Specific end use(s)

This information is not available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
144-62-7	Oxalic acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

##### Additional advice on limit values

If applied according to regulations, this will fall below the limit.

There is no risk to health.

#### 8.2. Exposure controls

##### Appropriate engineering controls

Not required.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Safety glasses with side-shields.

##### Hand protection

Protective gloves

Recommendation: Nature latex gloves with parts of polychloropren latex and a coating thickness of 0.6 mm which protect at least 8 hours (corresponds to the permeability level 6 of the European norm DIN/EN 374) and provide a resistance to swelling of < 15%.

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

Not required

##### Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 5 of 9

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	tan	
Odour:	mild	
		<b>Test method</b>
Melting point/freezing point:	<0 °C	
Boiling point or initial boiling point and boiling range:	>78 °C	
Flammability		
Solid/liquid:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	>60 °C	
Auto-ignition temperature:	>200 °C	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	< 0,5	K-QP1012C
Viscosity / kinematic:	not determined	
Water solubility: (at 20 °C)	completely miscible	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,24 g/cm <sup>3</sup>	K-QP1012E
Relative vapour density:	not determined	

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

Not explosive

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not relevant

#### Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Sublimation point:

not applicable

Softening point:

not applicable

Pour point:

not applicable

Viscosity / dynamic:

not determined

Flow time:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This information is not available.

### 10.2. Chemical stability

This information is not available.

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 6 of 9

#### 10.3. Possibility of hazardous reactions

This information is not available.

#### 10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.

#### 10.5. Incompatible materials

alkalis

#### 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

#### **Further information**

Do not mix with other detergents or chemicals.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

##### **Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
144-62-7	Oxalic acid				
	oral	ATE 500 mg/kg			
	dermal	ATE 1100 mg/kg			

##### **Irritation and corrosivity**

Causes severe skin burns and eye damage.

##### **Sensitising effects**

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

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

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

##### **Endocrine disrupting properties**

This information is not available.

#### **Further information**

The product causes burns of eyes, skin and mucous membranes.

Health injuries are not known or expected under normal use.

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

#### 12.2. Persistence and degradability

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 7 of 9

The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.  
Readily biodegradable, according to appropriate OECD test.

#### **12.3. Bioaccumulative potential**

This information is not available.

#### **12.4. Mobility in soil**

The formulation of the product does not contain halogen organic compounds (AOX) or AOX forming halogen compounds.

#### **12.5. Results of PBT and vPvB assessment**

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

#### **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.

#### **12.7. Other adverse effects**

This information is not available.

#### **Further information**

Chemical Oxygen Demand (COD) 150 mg O<sub>2</sub>/g.

## SECTION 13: Disposal considerations

### **13.1. Waste treatment methods**

#### **Disposal recommendations**

Container should be emptied thoroughly.  
Do not pour remains of product in large quantities into the sewage.

#### **List of Wastes Code - residues/unused products**

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

#### **List of Wastes Code - used product**

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

#### **Contaminated packaging**

Clean container with water. Return cleaned containers to the company for recycling.

## SECTION 14: Transport information

### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	UN 1805
<b><u>14.2. UN proper shipping name:</u></b>	PHOSPHORIC ACID, SOLUTION
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8



Classification code:	C1
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

### **Marine transport (IMDG)**

<b><u>14.1. UN number or ID number:</u></b>	UN 1805
---	---------

## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 8 of 9

**14.2. UN proper shipping name:** PHOSPHORIC ACID SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Special Provisions: 223  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-B  
Segregation group: Acids

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

Not required

#### 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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):  
Entry 3, Entry 75

#### National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level



## Safety Data Sheet

according to UK REACH Regulation

### 410 Rigorex

Revision date: 12.12.2022

Product code: c4100\_sd

Page 9 of 9

PNEC: Predicted No Effect Concentration  
 ATE: Acute toxicity estimate  
 LL50: Lethal loading, 50%  
 EL50: Effect loading, 50%  
 EC50: Effective Concentration 50%  
 ErC50: Effective Concentration 50%, growth rate  
 NOEC: No Observed Effect Concentration  
 BCF: Bio-concentration factor  
 PBT: persistent, bioaccumulative, toxic  
 vPvB: very persistent, very bioaccumulative  
 RID: Regulations concerning the international carriage of dangerous goods by rail  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
 intérieures)  
 EmS: Emergency Schedules  
 MFAG: Medical First Aid Guide  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 IBC: Intermediate Bulk Container  
 SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method

#### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*