Königliche

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Königliche Wäsche Geschirrspülmitteltabletten

5w1

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

Relevant uses: Dishwasher

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

PJ Chemikalien GmbH Westhafenstraße 1 13353 Berlin

Tel. +49 30 21 96 60 38

info@pj-chemikalien.de www.pj-chemikalien.de

Person responsible for preparing the safety data sheet: info@pj-chemikalien.de

1.4 Emergency telephone number: Tel. +49 30 21 96 60 38 (PJ Chemikalien GmbH)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Dam. 1: Serious eye damage, Category 1, H318 Ox. Sol. 3: Combustible solids, Category 3, H272 Skin Irrit. 2: Skin irritation, Category 2, H315

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger





Contains: sodium carbonate, compound with hydrogen peroxide

Hazard statements:

Eye Dam. 1: H318 - Causes serious eye damage Ox. Sol. 3: H272 - May intensify fire, oxidiser Skin Irrit. 2: H315 - Causes skin irritation

Precautionary statements:

P102: Keep out of reach of children

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280: Wear protective gloves/eye 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

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of organic and inorganic substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:





According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

	Identification		Chemical name/Classification		Concentration
		Sodium carbonate (1)		ATP CLP00	
EC: 207-838-8 Index: 011-005-00-2 REACH: 01-2119485498-19-XXXX	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	1	10 - <25 %	
CAS:		Silicic acid, sodium salt (2.6 < MR <=3.2) ⁽¹⁾	Self-classified	
EC: 215-687-4 Index: Non-applicable REACH: 01-2119448725-31-XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	1	10 - <25 %	
CAS:		Disodium carbonate, con	npound with hydrogen peroxide (2:3)(1)	Self-classified	
Index:	EC: 239-707-6 Index: Non-applicable REACH: 01-2119457268-30-XXXX	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Ox. Sol. 3: H272 - Danger	<u>(1)</u>	10 - <25 %
CAS: 77-92-9		Citric Acid ⁽¹⁾		Self-classified	
Index:	EC: 201-069-1 Index: Non-applicable REACH: 01-2119457026-42-XXXX	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	1	1 - <2,5 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

Bv inhalation

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) **Page 2/11**

Wäsche

According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 5: FIREFIGHTING MEASURES (continued)

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 40 °C

Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) Page 3/11



According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Substances whose occupational exposure limits have to be monitored in the workplace

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

DNEL (Workers):

		Short exposure Long exposu		xposure	
Identification		Systemic	Local	Systemic	Local
Sodium carbonate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 497-19-8	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 207-838-8	Inhalation	Non-applicable	Non-applicable	Non-applicable	10 mg/m ³
Silicic acid, sodium salt (2.6 < MR <=3.2)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1344-09-8	Dermal	Non-applicable	Non-applicable	1,59 mg/kg	Non-applicable
EC: 215-687-4	Inhalation	Non-applicable	Non-applicable	5,61 mg/m ³	Non-applicable
Disodium carbonate, compound with hydrogen peroxide (2:3)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 15630-89-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 239-707-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	5 mg/m³

DNEL (General population):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Sodium carbonate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 497-19-8	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 207-838-8	Inhalation	Non-applicable	10 mg/m ³	Non-applicable	Non-applicable
Silicic acid, sodium salt (2.6 < MR <=3.2)	Oral	Non-applicable	Non-applicable	0,8 mg/kg	Non-applicable
CAS: 1344-09-8	Dermal	Non-applicable	Non-applicable	0,8 mg/kg	Non-applicable
EC: 215-687-4	Inhalation	Non-applicable	Non-applicable	1,38 mg/m ³	Non-applicable

PNEC:

NEG!						
Identification						
Silicic acid, sodium salt (2.6 < MR <=3.2)	STP	348 mg/L	Fresh water	7,5 mg/L		
CAS: 1344-09-8	Soil	Non-applicable	Marine water	1 mg/L		
EC: 215-687-4	Intermittent	7,5 mg/L	Sediment (Fresh water)	Non-applicable		
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable		
Disodium carbonate, compound with hydrogen peroxide (2:3)	STP	16,24 mg/L	Fresh water	0,035 mg/L		
CAS: 15630-89-4	Soil	Non-applicable	Marine water	0,035 mg/L		
EC: 239-707-6	Intermittent	0,035 mg/L	Sediment (Fresh water)	Non-applicable		
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable		
Citric Acid	STP	1000 mg/L	Fresh water	0,44 mg/L		
CAS: 77-92-9	Soil	33,1 mg/kg	Marine water	0,044 mg/L		
EC: 201-069-1	Intermittent	Non-applicable	Sediment (Fresh water)	34,6 mg/kg		
	Oral	Non-applicable	Sediment (Marine water)	3,46 mg/kg		

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) Page 4/11



According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Protective gloves against minor risks	CATI		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

[&]quot;As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CATII	EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

I	Pictogram	PPE	Labelling	CEN Standard	Remarks
		Work clothing	CATI		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
		Anti-slip work shoes	CATII	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345 y EN 13832-1

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1:2002	Eyewash stations	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Solid
Appearance: Tablets

Colour: According to the markings on the package

Odour: Characteristic
Odour threshold: Non-applicable *

Volatility:

Boiling point at atmospheric pressure: Non-applicable * Vapour pressure at 20 °C: Non-applicable * Vapour pressure at 50 °C: Non-applicable * Evaporation rate at 20 °C: Non-applicable * * Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) **Page 5/11**



According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Product description:

Density at 20 °C: 1000 - 1100 kg/m³ Relative density at 20 °C: Non-applicable * Dynamic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 40 °C: Non-applicable * Concentration: Non-applicable * pH: 10 - 11 at 1 % Non-applicable * Vapour density at 20 °C: Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Highly water-soluble Non-applicable * Decomposition temperature: Melting point/freezing point: Non-applicable *

Explosive properties: Non-applicable *
Oxidising properties: H272 May intensify fire, oxidiser

Flammability:

Flash Point:

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

Non-applicable *

Non-applicable *

Non-applicable *

Explosive:

Lower explosive limit:

Upper explosive limit:

Non-applicable *

Non-applicable *

9.2 Other information:

Surface tension at 20 °C: Non-applicable *

Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable Not applicable		Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Not applicable	Not applicable	Not applicable	Avoid direct impact	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) **Page 6/11**



According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 10: STABILITY AND REACTIVITY (continued)

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces serious eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

 IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) **Page 7/11**

Wäsche

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

ON 11: TOXICOLOGICAL INFORMATION (continued)			
Identification		Acute toxicity	
Sodium carbonate	LD50 oral	4090 mg/kg	Rat
CAS: 497-19-8	LD50 dermal	Non-applicable	
EC: 207-838-8	LC50 inhalation	Non-applicable	
Disodium carbonate, compound with hydrogen peroxide (2:3)	LD50 oral	1034 mg/kg	Rat
CAS: 15630-89-4	LD50 dermal	Non-applicable	
EC: 239-707-6	LC50 inhalation	Non-applicable	
Citric Acid	LD50 oral	5400 mg/kg	Rat
CAS: 77-92-9	LD50 dermal	Non-applicable	
EC. 201 060 1	LCEO inhalation	Non applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
Sodium carbonate	LC50	740 mg/L (96 h)	Gambussia afinis	Fish
CAS: 497-19-8	EC50	265 mg/L (48 h)	Daphnia magna	Crustacean
EC: 207-838-8	EC50	Non-applicable		
Disodium carbonate, compound with hydrogen peroxide (2:3)	LC50	70.7 mg/L (96 h)	Pimephales promelas	Fish
CAS: 15630-89-4	EC50	4.9 mg/L (48 h)	Daphnia pulex	Crustacean
EC: 239-707-6	EC50	Non-applicable		
Citric Acid	LC50	1516 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 77-92-9	EC50	160 mg/L (48 h)	N/A	Crustacean
EC: 201-069-1	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification	Deg	radability	Biodegradability	
Citric Acid	BOD5	Non-applicable	Concentration	10 mg/L
CAS: 77-92-9	COD	Non-applicable	Period	28 days
EC: 201-069-1	BOD5/COD	Non-applicable	% Biodegradable	97 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Citric Acid	BCF	3
CAS: 77-92-9	Pow Log	-1.55
EC: 201-069-1	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Citric Acid	Koc	Non-applicable	Henry	Non-applicable
CAS: 77-92-9	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 201-069-1	Surface tension	2,045E-2 N/m (350,93 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS				
13.1	13.1 Waste treatment methods:			
	Code	Description	Waste class (Regulation (EU) No 1357/2014)	

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) Page 8/11

According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten

Revised: 19/08/2019 Version: 2 (Replaced 1) Date of compilation: 30/04/2018

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

20 01 29* detergents containing hazardous substances Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP2 Oxidising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:

14.1 UN number: Non-applicable 14.2 UN proper shipping name: Non-applicable 14.3 Transport hazard class(es): Non-applicable Labels: Non-applicable 14.4 Packing group: Non-applicable 14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: Non-applicable Tunnel restriction code: Non-applicable Physico-Chemical properties: see section 9 Limited quantities: Non-applicable Non-applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:

Transport of dangerous goods by sea:

With regard to IMDG 38-16:

14.1 UN number: Non-applicable 14.2 UN proper shipping name: Non-applicable 14.3 Transport hazard class(es): Non-applicable Labels: Non-applicable 14.4 Packing group: Non-applicable

14.5 Environmental hazards:

14.6 Special precautions for user

Special regulations: Non-applicable

EmS Codes:

Physico-Chemical properties: see section 9 Limited quantities: Non-applicable Non-applicable Segregation group: Non-applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:

Transport of dangerous goods by air:

With regard to IATA/ICAO 2019:

- CONTINUED ON NEXT PAGE -

Revised: 19/08/2019 Page 9/11 Date of compilation: 30/04/2018 Version: 2 (Replaced 1)

Safety data sheet According to 1907/2006/EC (REACH), 2015/830/EU



Königliche Wäsche Geschirrspülmitteltabletten

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 14: TRANSPORT INFORMATION (continued)

14.1 UN number: Non-applicable 14.2 UN proper shipping name: Non-applicable 14.3 Transport hazard class(es): Non-applicable Labels: Non-applicable 14.4 Packing group: Non-applicable

14.5 Environmental hazards:

14.6 Special precautions for user

Physico-Chemical properties: see section 9 Non-applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC

Code:

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Citric Acid (Product-type 2)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Regulation (EC) No 648/2004 on detergents:

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradibility criteria stipulated in Regulation (EC) nº648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Labelling for contents:

Component	Concentration interval
Oxygen-based bleaching agents	5 <= % (w/w) < 15
Non-ionic surfactants	% (w/w) < 5
Phosphonates	% (w/w) < 5
Polycarboxylates	% (w/w) < 5
Enzymes	
perfumes	

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P8		50	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

15.2 Chemical safety assessment:

- CONTINUED ON NEXT PAGE -

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) Page 10/11



According to 1907/2006/EC (REACH), 2015/830/EU

Königliche Wäsche Geschirrspülmitteltabletten 5w1

Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1)

SECTION 15: REGULATORY INFORMATION (continued)

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation

H318: Causes serious eye damage

H272: May intensify fire, oxidiser

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed

Eye Dam. 1: H318 - Causes serious eye damage Eye Irrit. 2: H319 - Causes serious eye irritation

Ox. Sol. 3: H272 - May intensify fire, oxidiser

Skin Irrit. 2: H315 - Causes skin irritation

STOT SE 3: H335 - May cause respiratory irritation

Classification procedure:

Eye Dam. 1: Calculation method

Skin Irrit. 2: Calculation method

Ox. Sol. 3

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu

http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET
Date of compilation: 30/04/2018 Revised: 19/08/2019 Version: 2 (Replaced 1) Page 11/11