

SAFETY DATA SHEET

DATE OF COMPILATION: 01.04.2022R.

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VERSION NUMBER: 2.0

Safety data sheet prepared in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 year changing attachment II down regulations (IN) No. 1907/2006 Parliament European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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

1.1. IDENTIFIER PRODUCT

Name commercial: **LIQUID DOWN CLEANING DISHWASHER "Königliche Wäsche"**

Intended use: Liquid down cleaning dishwashers on base acid lemon and surfactants.

Contains: Alcohols C12-15 branched and linear, ethoxylated propoxylated , Acid lemon . UFI:

P3DA-7406-J00T-JRGP

1.2. IMPORTANT IDENTIFIED APPLICATIONS MIXTURES AND APPLICATIONS NOT ADVISED

Applications identified: application consumer – as middle down cleaning dishwashers.

Applications not recommended: everyone type applications unmentioned above and In point 7.3.

1.3. DATA REGARDING SUPPLIERS CARDS CHARACTERISTICS

Name suppliers: PJ Chemicals GmbH

Address: Westhafenstraße 1, 13353 Berlin

Phone: +49 30 21 96 60 38

Address e-mail people responsible for card characteristics: info@pj-chemkalien.de

1.4. NUMBER PHONE ALARM

PHONES ALARM: 998 (GUARD FIRE).

999 (EMERGENCY).

WITH PHONES CELLULAR: 112.

OR NEAREST OFF-ROAD UNIT PSP.

SECTION 2: HAZARD IDENTIFICATION

2.1. CLASSIFICATION MIXTURES

Mixture according With rules classification included In Regulation Parliament European Parliament and of the Council (EC) No 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Annex VI). (OJ No. L353 of 31/12/2008) was **classified as posing a threat:**

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- **Causes serious damage eyes, category 1 – Eye I will. 1** That return indicating the type threats:

H318 Causes serious damage eyes.

- **Action irritating on skin, category 2 – Skin Irrit. 2** That return pointing type of threat:

H315 Works irritatingly on skin.

2.2. **ELEMENTS MARKINGS**

Pictogram determining type threats:



Password warning: **Danger**

H Returns indicating type threats:

H315 Works irritatingly on skin.

H318 Causes serious damage eyes.

P Returns indicating means precautions:

P102 Protect Before children.

P101 W for now necessity inquiries advice doctor should show container or label.

P103 Before use read label.

P280 Use gloves protective and protection eyes.

P305+P351+P338 W CASE GETTING MYSELF DOWN EYES: Carefully rinse water By several minutes. Remove lenses contact, if are and you can They are easy to remove. Continue rinsing.

P310 Immediately contact myself With doctor.

P302+P352 IF ON SKIN: Wash with plenty of water. Contains: Alcohols C12-15

branched and linear, ethoxylated propoxylated , Acid citric.

Marking detergents according With Regulation IN No. 648/2004 Parliament European and Councils and day March 31, 2004 on detergents (*OJ L 104/1 of 08.04.2004; of 2006 OJ L 168/5*) as amended.

Ingredients: non-ionic means surface active 5-15%, anionic means surfactants <5%, fragrances, Limonene.

2.3. **OTHER THREATS**

The components of the mixture (present in the mixture at a concentration equal to or greater than 0.1% by weight) **do not meet the criteria PBT and vPvB according With** Attachment XIII down regulations (IN) No. 1907/2006 Parliament European and the Council in matter registration, assessment, providing permits and used restrictions In in scope chemicals (REACH).

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Ingredients mixtures (present in mixture in concentration equal or bigger than 0.1% wt.) **no are entered as having properties disturbing functioning system hormonal down list** established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council European and the Council in regarding registration, grades, granting permits and used restrictions in in scope chemicals (REACH).
Ingredients mixtures (present in mixture in concentration equal or bigger than 0.1% wt.) **NO are classified as endocrine disruptors in accordance with the criteria set out in** Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

NO refers to

3.2. MIXTURES

Substances dangerous:

Name dangerous substance	Concentration range (% in/out)	CAS number	Number IN	Number registration	Classification according with the regulation (EC) No 1272/2008
C12-15 branched alcohols and linear, ethoxylated, propoxylated	5	120313-48-6	polymer	-	Skin Irrit 2; H315 Eye Irrit. 1; H318 Aquatic Acute 1; H400 (M Factor = 1) Aquatic Protect 3; H412
Acid citric	10	5949-29-1	201-069-1	01-2119457026-42- xxxx	Eye Irrit. 2; H319 STOT SE 3; H335
Kumenosulfonian sodowy	1,2	15763-76-5	239-854-6	01-2119489411-37- xxxx	Eye Irrit. 2; H319
Hydroxide sodium	0.3	1310-73-2	215-185-5	01-2119457892-27- xxxx	Skin Corr. 1A, H314 Underworld. Corr. 1, H290 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314 2% ≤ C < 5% Skin Irrit. 2; H315: 0.5% ≤ C < 2% Eye Irrit.2; H319:

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0.5 % ≤ C < 2 %

Full sound returns threats and returns H In section 16

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION MEANS FIRST HELP

Indications general:

IN case speeches any disturbing symptoms call immediately doctor or take the injured person to hospital, show the product packaging, label or safety data sheet.

Exposure By Dear respiratory:

- move the injured party on fresh air;
- to ensure warm and composure;
- to ensure access fresh air;
- In case bad well-being call doctor.

Exposure By contact With eyes:

- **rinse contaminated eyes with wide open eyelids under a continuous stream of running water for 10-15 minutes, avoiding a strong stream of water, which may create a risk of corneal damage;**
- NO use none fluids down washing eyes or none ointments Before consultation medical;
- In case When person injured party wears glasses contact should it is take off;
- **return myself about help**

medical advice. Exposure through skin

contact:

- take off contaminated clothes;
- contaminated skin wash large quantity water, and then Exactly rinse water;
- In case speeches disturbing symptoms return myself about help medical.

Exposure By wire digestive:

- rinse mouth large quantity water;
- NO to evoke vomiting;
- NO serve means neutralizing;
- return myself about help medical .

4.2. THE MOST IMPORTANT SPICY AND DELAYED SYMPTOMS AND CONSEQUENCES EXPOSURES

- exposure By Dear respiratory – product NO creates threats, Maybe to cause mild respiratory irritation;
- exposure By contact That skin - product Is irritant, causes skin irritation and redness.
- exposure By contact With with the eyes – product causes serious damage eyes - pain, tearing, redness;
- exposure By wire digestive – Maybe irritate esophagus and stomach, lack data.

4.3. INDICATIONS REGARDING ALL IMMEDIATELY HELP MEDICAL AND SPECIAL TREATMENT OF THE INJURED PERSON

Lack data.

SECTION 5. FIRE FIGHTING MEASURES

5.1. MEANS FIRE EXTINGUISHING

Appropriate means fire extinguishing: powders fire extinguishing, fire extinguishers foam; sprayed stream water, CO₂.

Inappropriate means extinguishing: compact stream water - risk of spreading fire.

5.2. SPECIAL THREATS RELATED WITH MIXTURE

The product does not pose a fire hazard, in a fire environment smoke containing substances hazardous to health, including carbon oxides and sulfur oxides.

5.3. INFORMATION FOR GUARD FIRE

Special equipment protective For firefighters: individual apparatus down breathing and clothes appropriate protective For smokers myself materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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6.1. **INDIVIDUAL MEANS PRECAUTIONS. EQUIPMENT PROTECTIVE AND PROCEDURES IN EMERGENCY SITUATIONS**

For people not belonging down staff granting Help:

- to avoid contact freed product With **with the eyes** and skin;
- use All right matched and close-fitting safety glasses In sealed housing (goggles) or appropriate mask protective;
- use gloves protective and clothes protective.

For people providing Help:

Materials, With what kind has to be made personal clothes protective:

- appropriate – gloves protective – acid-resistant;
- inappropriate – lack.

In the event of a release of industrial quantities, notify the appropriate authorities about the accident. services and remove from area threats people NO taking share In liquidation failure.

6.2. **MEANS PRECAUTIONS IN SCOPE PROTECTION ENVIRONMENTS**

- store With away From surface water, soil;
- to avoid pollution waters ground, secure manholes sewage, NO allow to enter the sewage system;
- inform the relevant services in the event of the introduction of industrial quantities of the product into water, sewage or soil.

6.3. **METHODS AND MATERIALS PREVENTIVE SPREAD MYSELF CONTAMINATION AND FOR REMOVING CONTAMINATION**

- contaminated surface and small amount released product rinse water;
- big quantity spilled liquid to become indifferent e.g. carbonate sodium, and then beg suitable material absorbing (earth, sand, universal substances absorbing) down containers;
- wash off place leak after complete removal freed product;
- to neutralize according With in force regulations.

6.4. **REFERENCES DOWN OTHERS SECTION**

Means protection personal : Look section 8.

SECTION 7: HANDLING AND STORAGE OF MIXTURES

7.1. **MEANS PRECAUTIONS REGARDING SAFE PROCEEDINGS**

- during use and storage product, comply with applicable regulations regarding security and hygiene work (Look: section 15), product use according With destiny and recommendations manufacturer;
- avoid direct contact of the product with eyes, if necessary use protective glasses;
- contaminated product clothes take off, contaminated skin wash water;
- while work With product NO slow consume meals, drink drinks and burn tobacco except in places designated for this purpose.
- Before breaks In work and after ending work With product should Exactly wash hands.

7.2. **CONDITIONS SAFE STORAGE. IN THIS INFORMATION REGARDING ANY MUTUAL INCOMPATIBILITIES**

- product store In cool, dry and All right ventilated rooms, With away from sources of heat and ignition,
- product store In original, closed, actually marked packaging;
- containers protect Before direct action rays sunny;
- NO store In nearby means foodstuffs;
- to avoid the following materials: substances oxidizing, alkali.

7.3. **SPECIAL APPLICATION(S) FINAL**

- product use according With destiny and recommendations manufacturer;
- to avoid direct contact product With with the eyes and skin;
- NO slow consume meals, drink drinks and burn tobacco while application product;
- after contact With product should Exactly wash hands.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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8.1. **PARAMETERS REGARDING CONTROL**

The mixture contains substances for which national values of the highest permissible concentrations of factors harmful to health in the work environment are defined according to the Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018, on the highest permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286), as amended.

Name and number CAS of the substance	NDS [mg/m ³]	NDSCH [mg/m ³]	NDSP [mg/m ³]
Hydroxide sodium [1310-73-2]	0.5	1	-

The mixture does not contain substances for which national occupational exposure limit values are established, which correspond to EU occupational exposure limit values in accordance with Directive 98/24/EC, including any provisions referred to in Article 2(3) of Commission Decision 2014/113/EU.

The mixture does not contain substances for which national occupational exposure limit values are established, which correspond to EU limit values in accordance with Directive 2004/37/EC, including any provisions referred to in Article 2(3) of Commission Decision 2014/113/EU.

The mixture does not contain substances for which national biological limit values are specified that correspond to EU biological limit values in accordance with Directive 98/24/EC, together with any arrangements referred to in Article 2(3) of Commission Decision 2014/113/EU.

Recommended procedures monitoring exposure in environment work:

- PN-Z-04008-7:2002/Az1:2004. Air purity protection. Sampling. Principles of air sampling in the work environment and interpretation. results.
- PN-EN-482:2009. Air at workplaces – General requirements for the characteristics of procedures for measuring chemical agents.
- PN-EN-689:2002. Air at workplaces – Guidelines for the assessment of inhalation exposure to chemical agents by comparison with limit values and measurement strategy.

Values **PNEC** (Level Non-causing Changes In environment) designated For Acid citric No. CAS [5949-29-1] :

Way exposure	Value
Water sweet	0.44 mg/L
Sewage treatment plant sewage STP	>1000 mg/L
Sea water	0.044 mg/L
Settlements (Fresh water)	34.6 mg/kg
Settlements (Sea water)	3.46 mg/kg
Soil	33.1 mg/kg

8.2. **CONTROL EXPOSURES**

Individual means protection:

Security eyes:

- by correct use NO Is required; use glasses protective type goggles in case of contact with industrial quantities.

Security cancer:

- if used correctly, not required, use acid-resistant gloves, resistant to chemicals in case of prolonged contact with the product.

Security roads respiratory:

- In case correct application NO Is required, use respirator, When they create aerosols and mists of the product appear .

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. **INFORMATION ON TOPIC BASIC PROPERTIES PHYSICAL AND CHEMICAL**

Condition concentration	liquid
Color:	colorless
Smell:	characteristic;
Melting/freezing point:	~ 0 °C
Boiling point or initial boiling point and temperature range	
boiling:	~ 100 °C
Flammability of materials:	product NO Is
flammable Lower and upper explosion limits:	not established
Temperature ignition:	no established For mixtures; >100 °C For ingredient Alcohols C12-15 branched and linear, ethoxylated propoxylated
Temperature self-ignition:	no established
Temperature decomposition:	no refers to
pH :	> 2 - < 3
Viscosity kinematic:	no established
Solubility:	in water dissolves
Partition coefficient: n-octanol/water:	not applicable
Resilience pairs:	no established
Density or relative density:	1000 – 1100 kg/ m ³ (20°C)
Relative vapor density:	not determined
Characteristic particles:	no refers to

9.2. **OTHER INFORMATION**

Lack data.

SECTION 10: STABILITY AND REACTIVITY

10.1. **REACTIVITY**

Mixture NO was tested – lack data regarding reactivity mixtures.

10.2 **STABILITY CHEMICAL**

Product Is stable In recommended conditions storage.

10.3. **POSSIBILITY OCCURRENCES DANGEROUS REACTION**

Under recommended storage and warehousing conditions, there is no possibility of hazardous reactions occurring.

10.4. **CONDITIONS. WHICH IT SHOULD TO AVOID**

It is necessary to avoid excessive temperatures, moisture.

10.5. **MATERIALS INCOMPATIBLE**

It is necessary to avoid substances alkaline, strong means oxidizing and reducing.

10.6. **DANGEROUS PRODUCTS DECOMPOSITION**

Mixture NO was tested - lack data.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **INFORMATION ON TOPIC CLASS THREATS DEFINED IN REGULATION (EC) No 1272/2008**

Toxicity sharp:

Mixture NO she was examined. IN based about accessible data regarding ingredients mixtures classification criteria are not met.

Toxicity sharp ingredient mixtures - Acid citric No. CAS [5949-29-1]:

LD50 (oral): 6730 mg/kg (rat).

Toxicity sharp ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5]:

LD50 (oral): >2000mg /kg (rat) (according to OECD 401);

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LD50 (skin): >2000mg /kg (rabbit).

LC50 (inhalation): >5 mg/l; 232 min.

Toxicity sharp ingredient mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

LD50 (skin): >2000mg /kg (rabbit).

Action irritating/corrosive on skin:

Mixture NO she was examined, But In based about accessible data regarding ingredients and That because of pH product **the mixture has been classified as irritating – the mixture irritates the skin.**

Action corrosive/irritant on skin ingredient mixtures - Acid citric No. CAS [5949-29-1]:

NO classified.

Action corrosive/irritant on skin ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5]:

Works slightly irritatingly on skin (test – rabbit, according to OECD 404).

Action corrosive/irritant on skin ingredient mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Works irritatingly on skin. – (rabbit, test BASF).

Serious damage eyes/action irritating on Eyes:

Mixture NO she was examined. IN based about accessible data regarding ingredients and with because on pH product **mixture she was classified as causing serious eye damage.**

Serious damage eyes/action irritating on Eyes ingredient mixtures - Acid citric No. CAS [5949-29-1] :

Causes serious irritation eyes.

Serious damage eyes/action irritating on Eyes ingredient mixtures - Cumenesulfonate sodium No. CAS

[15763-76-5]:

It has an irritating effect on Eyes (test – rabbit, according to OECD 405).

Serious damage eyes/action irritating on Eyes ingredient mixtures - - Alcohols C12-15 branched and linear, ethoxylated, propoxylated:

It occurs risk serious damage eyes . – (rabbit, test BASF).

Action sensitizing on Dear respiratory or skin:

Mixture NO has been examined. Based on about available data regarding ingredients classification criteria are not met.

Action sensitizing ingredient mixtures - Citric acid CAS No. [5949-29-1]:

NO classified.

Action sensitizing components of the mixture - Cumenesulfonate sodium No. CAS [15763-76-5]:

Doesn't work sensitizing – Buehler test, according to OECD 406 (piggy sea).

Action sensitizing ingredient mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Lack available data.

Action mutagenic on cells reproductive:

Mixture NO has been examined. IN based about available data regarding ingredients mixture NO is classified in this class.

Mutagenicity ingredient mixtures Cumenesulfonate sodium No. CAS [15763-76-5]:

Tests negative. None reports about undesirable consequences or critical threats.

Mutagenicity ingredients of the mixture : Acid citric No. CAS [5949-29-1], Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Lack available data .

Action carcinogenic:

Mixture NO has been examined. IN based about available data regarding ingredients classification criteria are not met.

Carcinogenicity of the ingredient mixtures - Acid citric CAS No. [5949-29-1]:

NO classified.

Carcinogenicity ingredients mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Lack available data.

Carcinogenicity ingredients mixtures - Cumenesulfonate sodium No. CAS [15763-76-5]:

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Test negative (species: rat/exposure: 2 years/road exposure: skin/test OECD 453). Lack reports about undesirables consequences or critical threats.

Harmful action on reproduction:

Mixture NO she was examined. IN based about accessible data regarding ingredients mixtures classification criteria are not met.

Harmful action on reproduction ingredient mixtures - Acid citric No. CAS [5949-29-1]:

NO classified.

Harmful action on reproduction ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5]: NOAEL: 3000mg/kg/oral (rat). No known significant effects or critical hazards. **Harmful action on reproduction ingredients mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:**

Lack available data.

Action toxic on organs target – exposure disposable:

Mixture NO has been examined. IN based about available data regarding ingredients of the mixture classification criteria are not met.

Action toxic on organs target – exposure repeated:

Mixture NO she was examined. IN based about accessible data regarding ingredients mixtures classification criteria are not met.

Danger caused aspiration:

Mixture NO has been examined. IN based about available data regarding ingredients of the mixture classification criteria are not met.

Information regarding probable roads exposure and symptoms exposure:

Mixture NO she was tested – lack available data.

11.2. INFORMATION ABOUT OTHER THREATS

Properties disturbing functioning system hormonal

The components of the mixture (present in the mixture at a concentration equal to or greater than 0.1% by weight) are not classified as having endocrine disrupting properties for human health according to the criteria set out in Regulations (EC) No 1907/2006, Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information:

Lack data

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Mixture NO she was examined. Mixture That because on low pH Maybe cause In In case of release, slight acidification of surface waters.

IN based about accessible data regarding ingredients **mixture NO she was classified as dangerous to the environment.**

Toxicity sharp ingredient mixtures – Acid citric No. CAS [5949-29-1]:

Fish: LC50: 440 –760 mg/l/72h (anhydrous substance); Daphnia magna: LC100: ~ 120 mg/l/72h (substance anhydrous).

Toxicity sharp ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5]:

Fish: LC50 > 100 mg/l/96h;
Algae: EC50 > 100 mg/l/96h;
Daphnia: EC50>100mg/l/48h (Daphnia magna).

Toxicity sharp ingredient mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Fish: LC50 0.1 - 1 mg/l/96h (Brachydanio rerio);
Aquatic invertebrates: EC50 1-10 mg/l/48h;
Aquatic plants: EC50 0.1 – 1 mg/l/72h;

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12.2. **DURABILITY AND CAPACITY TO DECOMPOSITION**

Mixture NO she was examined.

Durability and capacity down decomposition ingredient mixtures - Acid citric No. CAS [5949-29-1] :

Biodegradable 97%/28 days.

Durability and capacity down decomposition ingredient mixtures - C12-15 branched alcohols and linear, ethoxylated propoxylated:

Chemical demand oxygen: COD: 2.215mg/g.

Biochemical oxygen demand: 310mg/g.

Durability and capacity down decomposition ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5] :

Easy biodegradable >60%, 28 days (according to OECD 301B).

12.3. **CAPACITY DOWN BIOACCUMULATION**

Mixture NO she was examined.

Capacity down bioaccumulation ingredient mixtures - Cumenesulfonate sodium No. CAS [15763-76-5] :

logPow=-1.1 (short).

Capacity down bioaccumulation ingredients mixtures - Acid citric No. CAS [5949-29-1] :

Lack available data.

Capacity down bioaccumulation ingredients mixtures - Alcohols C12-15 branched and linear, ethoxylated propoxylated:

NO should expect myself collecting In body.

12.4. **MOBILITY IN SOIL**

Mixture NO she was examined.

Mobility In soil ingredient mixtures Alcohols C12-15 branched and linear, ethoxylated propoxylated:

Possible Is adsorption down phases constant soil.

Mobility In soil ingredient Cumenesulfonate sodium No. CAS [15763-76-5]:

NO adsorbs myself In soil.

Mobility In soil ingredient mixtures Acid citric No. CAS [5949-29-1] :

Lack available data.

12.5. **RESULTS GRADES PROPERTIES PBT and vPvB**

Mixture NO she was examined.

Results grades PBT properties and vPvB of the mixture components – no data.

12.6. **PROPERTIES DISTURBING FUNCTIONING SYSTEM HORMONAL**

The components of the mixture (present in the mixture at a concentration equal to or greater than 0.1% by weight) are not classified as having endocrine disrupting properties for the environment according to the criteria set out in Regulations (EC) No 1907/2006, Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. **OTHER HARMFUL CONSEQUENCES ACTIONS**

Lack data.

SECTION 13: WASTE CONSIDERATIONS

13.1. **METHODS DISPOSAL WASTE**

Procedure With waste product

Large quantity waste product NO remove down sewerage. Liquidate In entitled incinerators or plants treatment/disposal waste, according With in force regulations (Look Mr. 15).

Code waste: 07 06 99 Waste With production, preparations, turnover and application fats, grease, soaps, detergents, means disinfectants and cosmetics. Other NO listed waste.

Procedure With waste packaging

Packaging after product to treat How waste With farms home.

Recovery, recycling or liquidation waste packaging emerging In area activities carry out professional according With in force regulations (Look p.15).

SECTION 14: TRANSPORT INFORMATION

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Transport road (ADR/RID):

- 14.1. **NUMBER UN OR NUMBER IDENTIFICATION ID:** no refers to.
- 14.2. **CORRECT NAME TRANSPORT UN:** no refers to.
- 14.3. **CLASS(S) THREATS IN TRANSPORT:** no refers to.
- 14.4. **GROUP PACKING:** no refers to.
- 14.5. **THREATS FOR ENVIRONMENTS:** mixture NO she was tested, ingredients mixtures they are not classified as dangerous For environment in accordance With agreement ADR/RID.
- 14.6. **SPECIAL MEANS PRECAUTIONS FOR USERS**
IN for now occurrences while transportation accident or threats members crew vehicle should do the following (if possible and safe):
- stop vehicle, turn off engine and disconnect battery;
- to avoid sources ignition, In in particular NO burn and NO switch on none devices electric;
- NO touch released materials, NO inhale fumes, smoke, dust, par;
- to notify appropriate services rescue;
- use myself down recommendations services rescue.
- 14.7. **TRANSPORT MARITIME BULK ACCORDING WITH INSTRUMENTS IMO**
NO refers to.

SECTION 15: REGULATORY INFORMATION

Mixture NO Is covered provisions of the regulation Parliament European and Councils (IN) No. 1005/2009 from the day 16 September 2009 In matter substances impoverishing layer ozone , regulations (IN) No. 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and changing directive 79/117/EEC, regulations Parliament European and Council Regulation (EC) No 649/2012 of 4 July 2012 concerning the export and import of dangerous chemicals.

15.1 **REGULATIONS LEGAL REGARDING SECURITY, HEALTH AND ENVIRONMENTAL PROTECTION SPECIFIC TO THE MIXTURE**

1. Act from the day 25 February 2011 about substances chemical and their mixtures (Journal of Laws 2011 No. 63, item 322) That Change from 2020 (Journal of Laws of 2020, item 1337). Consolidated text – Notice marshal Sejm of the Republic of Poland Polish of November 18, 2020 on the announcement of the consolidated text of the Act on chemical substances and their mixtures (Journal of Laws of 2020, item 2289).

2. Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018, on the maximum permissible concentrations and intensities factors harmful For health In environment work (Journal of Laws 2018 item 1286) That Change from the day 09 January 2020 (Journal of Laws 2020, item 61) and of February 18, 2021 (Journal of Laws 2021, item 325).

3. Ordinance Minister Health from the day 2 February 2011 In matter research and measurements factors harmful For health in the work environment (Journal of Laws No. 33, item 166). as amended on October 11, 2019 (Journal of Laws 2019, item 1995)

4. Ordinance Minister Work and Politics Social With day 26 September 1997 In matter general safety regulations and occupational hygiene (Journal of Laws No. 129, item 844 That Change of 2002 Journal of Laws No. 91, item 811, of 2007 Journal of Laws No. 49, item 330, of 2008 Journal of Laws No. 108, item 690, of 2011 Journal of Laws No. 173, item 1034). Announcement of the Ministry of Economy, Labour and Social Policy of 28 August 2003 regarding the announcement of the consolidated text (Journal of Laws No. 169, item 1650).

5. Regulation of the Minister of Health of 30 December 2004 on occupational health and safety related to the occurrence of work factors chemical (Journal of Laws No. 11, item 86 from 2005 with Change With 2008 Journal of Laws No. 203, item 1275, from 2015 Journal of Laws 2015 item 1097). Consolidated text – Notice of the Minister of Health of 9 September 2016 on the announcement of the consolidated text of the regulation of the Minister of Health on occupational health and safety related to the presence of chemical factors in the workplace, Journal of Laws 2016 item 1488.

6. Act With day 14 December 2012 about waste (Journal of Laws With 2013, item 21) With later changes.

7. Ordinance Minister Climate With day 2 January 2020 In matter catalog waste (Journal AT. 2020 item 10)

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8. Act With day 13 June 2013 about economy packaging and waste packaging (item 888). That changes.

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Name Commercial: **LIQUID DOWN CLEANING DISHWASHER "Königliche Wäsche"**
Producer: PJ Chemikalien GmbH
Address: Westhafenstraße 1, 13353 Berlin
Phone/Fax: +49 30 21 96 60 38

Text uniform - NOTICE MARSHAL SEJM REPUBLIC OF POLAND POLAND from the day 29 May 2020 In regarding the announcement of the consolidated text of the Act on packaging and packaging waste management, Journal of Laws 2020, item 1114.

9. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending directive 1999/45/EC and repealing ordinance Council (EEC) No. 793/93 and ordinance Commission (IN) No. 488/94, as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006), as amended.

REACH (Article 59) – List candidate substances constituting Very big danger waiting on permission - NO applicable. REACH (Annex XVII) – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles - not applicable.

REACH (Attachment XIV) – list substances subject to procedure granting permits. – NO refers to.

10. Ordinance Parliament European and Council (EC) No. 1272/2008 from the day 16 December 2008 In matter classification, markings and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Annex VI). (OJ No L353, 31.12.2008) with subsequent amendments.

11. Ordinance IN No. 648/2004 Parliament European and the Council and day 31 March 2004 In matter detergents (OJ L 104/1 of 08.04.2004; of 2006 OJ L 168/5) as amended.

12. Directive Council Directive 98/24/EC With day 7 April 1998 In matter protection health and security employees Before risks associated with exposure to chemical agents at work.

13. Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative exposure limit values on factors external while working In relationship With implementation of the Council directive 98/24/EEC In matter protection health and employee safety against risks associated with chemical factors at work. (OJ No. L 142/47 from 2000).

14. Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative exposure limit values professional In purpose execution directives Councils 98/24/EC and changing directives 91/322/EEC and 2000/39/EC. (OJ No. L 38/36 of 2006).

15. Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values In purpose execution directives Council Directive 98/24/EC and changing directive Commission 2000/39/EC. (Journal of Laws No. L 338/87 from 2009).

16. COMMISSION DIRECTIVE (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative limit values exposure professional according with the directive Councils 98/24/EC and changing directives Commission 91/322/EEC, 2000/39/EC and 2009/161/EU.

17. Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks concerning exposure on action factors carcinogenic or mutagens while work. (Journal of Laws No. L 158/50 With 2004).

15.2. **RATE SECURITY CHEMICAL**

NO was carried out grades security chemical mixtures.

SECTION 16: OTHER INFORMATION

General update: section 1, 2, 3, 8, 9, 11, 12, 14, 15, 16.

Classification mixtures was carried out according to the following methods:

- category "acute toxicity" – method additivity;
- category "action corrosive/irritant on skin" – method additivity ;
- category "serious damage eyes/action irritating on Eyes" - method additivity;
- category "action sensitizing on Dear respiratory or skin" – on basis content of classified ingredients;
- category "action mutagenic on cells reproductive"- on basis content classified ingredients ;
- category "carcinogenicity" – on basis content ingredients classified;
- category "harmful effects on reproduction" – on basis content classified ingredients ;
- category "action toxic on organs target – exposure disposable" – on based on the content of classified ingredients;
- category "action toxic on organs target – exposure repeated" – on based on the content of classified ingredients;
- category "danger caused aspiration" – method additivity;
- category "ecotoxicity" – method additivity.

Abbreviations and acronyms:

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PBT – *Persistent, Bioaccumulative, Toxic.*

vPvB – *Very Persistent and very Bioaccumulative.*

LD50 – *(eng. Lethal Dose, 50%) dose substances toxic calculated In milligrams on kg masses bodies needed to kill 50% of the study population.*

LC50 – *(eng. Lethal Concentration) – concentration fatal, concentration causing rise 50% mortal effect test.*

EC50 - *(eng. half maximum effective concentration) - concentration causing rise 50% in vivo test effect.*

LogPow - *logarithm coefficient division n-octanol – water.*

NOAEL - *the highest concentration, by which NO they reveal myself still unfavorable effects actions.*

COD – *chemical demand oxygen;*

List returns pointing type threats and returns pointing means precautions given in sections 2-15:

Met. Corr. 1	Substance or mixture corrosive to metals, hazard category 1. Eye Irrit. 2 Effects irritating on Eyes, category threats 2
Eye Dam. 1	Serious damage eyes, category threats 1. Skin Corr.
1A	Skin Corrosion, Hazard Category 1A. Skin Corr. 1B Effects corrosive on skin, category threats 1B. Skin Irrit.
2	Skin irritation, hazard category 2.
STOT SE 3	Specific target organ toxicity – single exposure STOT single exposure hazard category 3.
Aquatic Acute 1	Posing danger For environment water – danger disposable, category 1. Aquatic Chronic 3 Posing danger For environment water – danger chronic, category 3.
H290	Maybe to cause corrosion metals.
H314	Causes serious burns skin and damage eyes.
H315	Works irritatingly on skin.
H318	Causes serious damage eyes.
H319	Works irritatingly on Eyes.
H335	Maybe to cause irritation roads respiratory.
H400	Works Very toxic on organisms water.
H412	Works harmful on organisms water, causing long-term consequences.

The above information were left developed In based about current condition knowledge and experiences. NO however, they constitute warranty ownership product or specifications qualitative and NO they can to be base down complaints. Product should to be transported, stored and applied according With in force regulations and All right practice and hygiene work.

Producer NO bears responsibility for losses resulting directly or indirectly That applying the above interpretation of regulations or instructions.

Presented information NO they can to have applications For mixtures product With others substances. Use given information, How and use product, NO are controlled By manufacturer, and therefore duty user Is creation appropriate conditions safe celebrating myself with the product.