

DUAL POWER-PEARLS

Issued on 07/29/2019 - Rel. # 1 on 07/29/2019

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In conformity to Regulation (EU) 2015/830

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name: DUAL POWER-PEARLS Product code: refer to sales department

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

Alkaline cleaning for ACT.O ovens

Sectors of use:

Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Use in closed, continuous process with occasional controlled exposure[PROC2], Transfer of substance or mixture (charging and discharging) at nondedicated facilities[PROC8A], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B]

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Distributore esclusivo/Exclusive supplier: ANGELO PO Grandi Cucine 41012 Carpi (Italy) S/S Romana Sud, 90 Tel. +39.059.639411 - Fax +39.059.642499

e-mail: angelopo@angelopo.it http://www.angelopo.it

1.4. Emergency telephone number

Centralino/Switchboard +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT+1; Lingua/Language: Italiano, English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05

Hazard Class and Category Code(s):

Met. Corr. 1, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

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The product can be corrosive to metals

Corrosive product: causes severe skin burns and eye damage.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS05 - Danger

Hazard statement Code(s):

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

Prevention

P260 - Do not breathe dust.

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

Response

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Contains:

Sodium hydroxide

Contains (Reg.EC 648/2004):

5% < 15% oxygen-based bleaching agents, < 5% phosphonates, non-ionic surfactants

2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Dlgs n. 81. April 9, 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and quantity of dangerous chemical agent and method and frequency of exposure to the agent, there is only a "moderate Risk" for the health and safety of workers and that the measures laid down in the Decree are sufficient to reduce the risk.

For professional use only

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SECTION 3. Composition/information on ingredients



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3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACh
Sodium hydroxide	> 50 <= 100%	Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	011-002-00-6	1310-73-2	215-185-5	01-2119457 892-27-XXX X
Sodium carbonate	> 10 <= 20%	Eye Irrit. 2, H319	011-005-00-2	497-19-8	207-838-8	01-2119485 498-19-XXX X
Sodium percarbonate	> 10 <= 20%	Ox. Sol. 2, H272; Acute Tox. 4, H302; Eye Dam. 1, H318		15630-89-4	239-707-6	01-2119457 268-30-XXX X
(1-hydroxyethylidene)bisphospho nic acid, sodium salt	> 1 <= 5%	Met. Corr. 1, H290; Acute Tox. 4, H302; Eye Irrit. 2, H319		29329-71-3	249-559-4	01-2119510 382-52-XXX X

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:

Take off immediately contaminated clothing.

In case of contact with skin, wash immediately with watrer.

Immediately consult a physician.

Direct contact with eyes (of the pure product).:

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Drink water with egg white; do not give bicarbonate.

Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

Immediately call a POISON CENTER or a doctor.



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SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Privide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills

Inform the competent authorities.

Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS) Recover the product for reuse, if possible, or for elimination.

6.3.2 Cleaning up:

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After wiping up, wash with water the area and materials involved

6.3.3 Other information: None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Wear protective gloves/protective clothing/eye protection/face protection. In residential areas do not use on large surfaces. At work do not eat or drink.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Public domain (administration, education, entertainment, services, craftsmen): Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

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Related to contained substances:

Sodium hydroxide:

Limit value - Eight hours (ppm)/(mg/m3)

Australia: x/x

Austria: x/2 inhalable aerosol

Belgium: x/2

Canada – Ontario: x/x Canada - Québec: x/x

Denmark: x/2 Finland: x/x France: x/2 Hungary: x/2 Ireland: x/x Latvia: x/0,5 New Zealand: x/x

People's Republic of China: x/x

Poland: x/0,5



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Singapore: x/x South Korea: x/x Spain: x/2 Sweden: x/1

Switzerland: x/2 inhalable aerosol

USA – NIOSH: x/x USA – OSHA: x/2 United Kingdom: x/x

Limit Value - Short Term

(ppm)/(mg/m3) Austalia: x/2(1)

Austria: x/4 inhalable aerosol

Belgium: x/x

Canada - Ontario: x/2(1) Canada - Québec: x/2(1)

Denmark: x/2 Finland: x/2(1) France: x/x Hungary: x/2 Ireland: x/2(1) Latvia: x/x

New Zealand: x/2(1)

People's Republic of China: x/2(1)

Poland: x/1 Singapore: x/2 South Korea: x/2(1)

Spain: x/x

Sweden: x/2(1)(2)

Switzerland: x/2 inhalable aerosol

USA – NIOSH: x/2(1) USA – OSHA: x/x United Kingdom: x/2

Remarks:

Australia: (1) Celling limit value

Canada – Ontario: (1) Celling limit value Canada – Québec: (1) Celling limit value

Finland: (1) Celling limit value

Ireland: (1) 15 minutes reference period New Zealand: (1) Celling limit value

People's Republic of China: (1) Celling limit value

South Korea: (1) Celling limit value

Sweden: (1) Inhalable dust (2) Celling limit value USA – NIOSH: (1) Celling limit value (15 min)

Tipo OEL: ACGIH -- Nazione: ITALY - STEL: C 2.0 mg/m3

Tipo OEL: ACGIH - STEL: C2 mg/m3 - Note: URT, eye, and skin irr

Sodium carbonate:

Tipo OEL: OEL TWA: 10mg/m3

- Substance: Sodium hydroxide

DNEL

Systemic effects Short term Workers inhalation = 1 (mg/m3) Systemic effects Short term Consumers inhalation = 1 (mg/m3) Local effects Short term Workers inhalation = 1 (mg/m3) Local effects Short term Consumers inhalation = 1 (mg/m3)



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- Substance: Sodium carbonate

DNEL

Local effects Long term Workers inhalation = 10

Local effects Long term Consumers inhalation = 10 (mg/m3)

- Substance: Sodium percarbonate

DNEL

Local effects Long term Workers inhalation = 5

Local effects Long term Consumers inhalation = 5 (mg/m3)

PNEC

Sweet water = 0.035 (mg/I)

Sea water = 0.035 (mg/l)

STP = 16,24 (mg/l)

- Substance: (1-hydroxyethylidene)bisphosphonic acid, sodium salt

DNEL

Systemic effects Long term Consumers oral = 6,5 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 6,5 (mg/kg bw/day)

PNEC

Sweet water = 0,134 (mg/I)

sediment Sweet water = 59 (mg/kg/sediment)

Sea water = 0.014 (mg/I)

sediment Sea water = 5,9 (mg/kg/sediment)

STP = 20 (mg/l)

ground = 41 (mg/kg ground)

8.2. Exposure controls









Appropriate engineering controls:

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

8.2.2 Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (EN 166).

(b) Skin protection

(i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3) or other protective equipment, according to the instructions of the employer

(ii) Other

When handling the pure product, wear full protective clothing (generic workwear / antacid, safety shoes S3-EN ISO 20345) or other protective equipment, according to the instructions of the employer

(c) Respiratory protection

Not needed for normal use.

During manual operations in case of insufficient ventilation, use mask with gas filters and inorganic vapors - Grey , Class 3 , B (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic

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(d) Thermal hazards No hazard to report

Environmental exposure controls:

Use according to good working practices and avoid to disperse the product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	white granular powder	
Odour	not determined as considered not relevant for the characterization of the product	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
рН	13,0 ± 0,5 (20 ° C; sol 5%)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1,05 ± 0,05 (20 ° C)	
Solubility	in water	
Water solubility	not determined as it is considered not relevant for the characterization of the product	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	
Viscosity	not determined as considered not relevant for the characterization of the product	
Explosive properties	not determined as considered not relevant for the characterization of the product	
Oxidising properties	not determined as considered not relevant for the characterization of the product	

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Physical and chemical properties	Value	Determination method
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9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Sodium hydroxide: Highly reactive product

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate flammable gases in contact with halogenated organic substances, elementary metals.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 4.664,6 mg/kg ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: Sodium hydroxide: Ingestion - LD50 rat (mg / kg / 24h bw): nd Skin contact - LC50 rabbit (mg / kg / 24h bw): 1350

Inhalation - LD50 rat (mg / I / 4h): nd



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Sodium carbonate: Ingestion - LD50 rat (mg / kg / 24h bw): 2800

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 2000

Inhalation - LD50 rat (mg / I / 4h): 2.3

Sodium percarbonate: LD50 rat (mg / kg / 24h bw): 893-1164 Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 2000

Inhalation - LD50 rat (mg / I / 4h): 0.7

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Ingestion-rat LD50 (mg/kg/bw 24h): 300-2000

Skin contact-LC50 rat/coniglio (mg/kg/bw 24h): > 5000

Inhalation-rat LD50 (mg/l/4h): n.a.

(b) skin corrosion/irritationCorrosive product: causes severe skin burns and eye damage.

Sodium hydroxide: Corrosive Sodium carbonate: Non-corrosive Sodium percarbonate: Not corrosive

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-corrosive

Sodium hydroxide: Irritating Sodium carbonate: Irritating Sodium percarbonate: Not irritating

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-irritating

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Sodium hydroxide: Corrosive Sodium carbonate: Non-corrosive Sodium percarbonate: Not corrosive

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-corrosive

Sodium hydroxide: Irritating Sodium carbonate: Irritating Sodium percarbonate: Irritating

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Irritating

(d) respiratory or skin sensitization: Sodium hydroxide: Not sensitizing

Sodium carbonate: Non-sensitizing Sodium percarbonate: Not sensitizing

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-sensitizing

(e) germ cell mutagenicity: Sodium hydroxide: Not mutagenic

Sodium carbonate: Non-mutagenic Sodium percarbonate: Not mutagenic

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-mutagenic

(f) carcinogenicity: Sodium hydroxide: Not carcinogenic

Sodium carbonate: Non-carcinogenic Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-carcinogenic (g) reproductive toxicity: Sodium hydroxide: Non-toxic for reproduction

Sodium carbonate: Non-toxic for reproduction Sodium percarbonate: Not toxic for re-circulation

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: Sodium hydroxide: The substance can be absorbed into the body by inhalation of its aerosols and by ingestion.

Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not available

(i) specific target organ toxicity (STOT) repeated exposureSodium hydroxide: The substance can be absorbed into the body by inhalation of its aerosols and by ingestion. The symptoms of pulmonary edema often do not manifest themselves before a few hours and are exacerbated by physical exertion. Rest and medical observation are therefore essential

Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not available

(j) aspiration hazard: Sodium hydroxide: Not available



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Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not disponibile

Related to contained substances:

Sodium hydroxide:

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1350

Sodium percarbonate:

LD50 (rat) Oral (mg/kg body weight) = 893

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:

LD50 (rat) Oral (mg/kg body weight) = 500

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Sodium hydroxide:

Acute toxicity - LC50 fish (mg / I / 96h): 45

Acute toxicity - crustaceans EC50 (mg / I / 48h): 40

Acute toxicity algae ErC50 (mg / I / 72-96h): nd

Chronic toxicity - NOEC fish (mg / I): nd

Chronic toxicity - crustaceans NOEC (mg / I): nd

Chronic toxicity NOEC algal (mg / I): nd

Sodium carbonate:

Acute toxicity - LC50 fish (mg / I / 96h):> 300

Acute toxicity - crustaceans EC50 (mg / I / 48h): 210

Acute toxicity algae ErC50 (mg / I / 72-96h): 740

Sodium percarbonate:

Acute toxicity - LC50 (mg / I / 96h): 70.7

Acute toxicity - EC50 crust (mg / I / 48h): 4.9

Acute algae toxicity ErC50 (mg / I / 72-96h): nd

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:

Acute toxicity-fish LC50 (mg/l/96h): 2670-3400

Acute toxicity-crustacea EC50 (mg/l/48 h): 466-610

Acute algae toxicity ErC50 (mg/l/72-96h): > 960

Chronic toxicity-crustaceans NOEC (mg/l): 0.1

C(E)L50 (mg/I) = 466

NOEC (mg/I) = 0,1

Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

Related to contained substances:

Sodium hydroxide:

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Not applicable
Sodium carbonate: Not available
Sodium percarbonate: Not available
(1-hydroxyethylidene)bisphosphonic acid, sodium salt: ~ 50% OECD 302 B * COD (Std. Method 5220 D): 330 mg / g * BOD-5 (Std. Method 5210 B): 20 mg / g * MBAS: 0 mg / g * BiAS: 0 mg / g
12.3. Bioaccumulative potential
Related to contained substances: Sodium hydroxide: Not bioaccumulative
Sodium carbonate: Not available
Sodium percarbonate: Not available
(1-hydroxyethylidene)bisphosphonic acid, sodium salt: No other information available
12.4. Mobility in soil
Related to contained substances: Sodium hydroxide: Not applicable
Sodium carbonate: Not available
Sodium percarbonate: Not available
(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not available

12.5. Results of PBT and vPvB assessment

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII



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12.6. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648

The (I) surfactant (s) content (s) in this preparation complies (comply) with (i) the biodegradability criteria as laid down in Regulation CE/648/2004 on detergents. All data are held at the disposal of the competent authorities of Member States and will be provided, at their direct request or at the request of a detergent manufacturer, to those authorities.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 3262

8

If subject to the following characteristics is ADR exempt:
Combination packagings: per inner packaging 1 kg per package 30 Kg
Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 1 kg per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: SOLIDO INORGANICO CORROSIVO, BASICO, N.A.S. (Idrossido di sodio in miscela) ADR/RID/IMDG: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide in mixture) ICAO-IATA: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide in mixture)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class: 8 ADR/RID/IMDG/ICAO-IATA: Label: 8 ADR: Tunnel restriction code: E

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 kg

IMDG - EmS: F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent: No



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14.6. Special precautions for user

The transport must be carried out by authorized vehicles for the transport of dangerous goods in accordance with the requirements of the applicable Edition of the agreement A.D.R. and national provisions. The transport must be carried out in the original packaging and in packages that are made from materials resistant to content and not likely to generate with this dangerous reactions. The process of loading and unloading of dangerous goods have received adequate training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or contained substances (All. XVII Reg. EC 1907/2006): not applicable Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2

REGULATION (EU) No 1357/2014 - waste: HP8 - Corrosive

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Description of hazard statements set out in paragraph 3

H290 = May be corrosive to metals.

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

H319 = Causes serious eye irritation.

H272 = May intensify fire; oxidiser.

H302 = Harmful if swallowed.

Classification based on data of all mixture components

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Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.

Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.

Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.

Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Procedure used to classify under CLP mixture (Reg . EC 1272/2008):

Physical hazards: On the basis of experimental data

H314 Skin. Corr. 1A: On the basis of experimental data / Calculation Method

Other hazards: Calculation Method

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable n.d.: not available

ADR: Accord europèen relative au transport International des merchandises dangereuses par route (European

Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimat
BFC: BioconCentration Factor
BOD: Biochemical Oxigen Demand
CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified

Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50
COD: Chemical Oxygen Demand
DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient NOEC: No Observed Effect Concentration OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernent le transport International ferroviaire des merchandises dangereuses (Regulations

concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure STOT (SE): Single Exposure STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

ONGELO PO

SAFETY DATA SHEET

DUAL POWER-PEARLS

Issued on 07/29/2019 - Rel. # 1 on 07/29/2019

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In conformity to Regulation (EU) 2015/830

- ECHA Registered Substances:
- https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances
- SDS supplier
- GESTIS DNEL Database: http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp
- GESTIS International Limit Value: http://limitvalue.ifa.dguv.de

This msds was made in good faith on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: first emission



AISE GEIS.2.1.a.v1



Version: 1.0, May 2014

Using a professional product in a semi closed system

Operational conditions	
Maximum duration	480 minutes per day.
Process conditions	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures		
Conditions and measures related to	No PPE necessary.	
personal protection equipment		
(PPE), hygiene and health evaluation		

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Enviromental measures

Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descri	Use descriptors	
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 2	Use in closed, continuous process with occasional controlled exposure	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the GEIS CSP documents is safe, according to the GEIS Formulator Guidance. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

The A.I.S.E. or the NVZ are under no conditions liable for any damage, no matter of what kind, which is the direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.

Angelo Po ES.2.1.a.v1

Version: 1.0, May 2014

Using a professional product in a semi closed system

Operational conditions	
Maximum duration	480 minutes per day.
Process conditions	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures		
Conditions and measures related to	No PPE necessary.	
personal protection equipment		
(PPE), hygiene and health evaluation		

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Environmental measures Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descri	Use descriptors	
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 2	Use in closed, continuous process with occasional controlled exposure	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

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AISE GEIS.8a.1.a.v1



Version: 1.0, May 2014

Transfer of professional product to a container (bottle/bucket/machine)

Operational conditions	
Maximum duration	50 minutes per day.
Process conditions	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures

Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation

Use gloves and safety goggles. See Section 8 of the SDS of this product for specifications.



Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Enviromental measures

Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

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Angelo Po ES.8a.1.a.v1

Version: 1.0, May 2014

Transfer of professional product to a container (bottle/bucket/machine)

Operational conditions	
Maximum duration	50 minutes per day.
Process conditions	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation specifications.

Use gloves and safety goggles, work clothes, safet shoes. See Section 8 of the SDS of this product for specifications.



Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Environmental measures
Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	
ERC 8a	C 8a Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

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AISE GEIS.8b.1.a.v1



Version: 1.0, May 2014

Transfer of professional product via a dedicated system (bottle/machine)

Operational conditions	
Maximum duration	40 minutes per day.
Process conditions	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Enviromental measures

Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	
ERC 8a Wide dispersive indoor use of processing aids in open systems		
If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use "Down the drain" cleaning and maintenance products that are treated by a municipal STP.		

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Angelo Po ES.8b.1.a.v1

Version: 1.0, May 2014

Transfer of professional product via a dedicated system (bottle/machine)

Operational conditions	
Maximum duration	40 minutes per day.
Process conditions	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	\$! 3!
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the SDS of the used product.

Enviromental measures

Prevent that the undiluted product reaches surface waters.

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Use descriptors	
SU 3	Industrial uses
PC 35	Washing and cleaning product
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
ERC 8a	Wide dispersive indoor use of processing aids in open systems
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.

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