1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 PRODUCT IDENTIFIER

Trade name: PULY CAFF Plus® NSF POWDER/TABLET

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Cleaning detergent specifically for espresso and filter coffee brewer

Uses advised against: do not use for purposes other than those indicated

1.4 EMERGENCY TELEPHONE NUMBER

Poison Control Centre – Ospedale Niguarda - +39(0)2 66101029 - Poison Control Centre –Roma Policlinico Gemelli +39(0)6 3054343

2 HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

REGULATION (EC) No. 1272/2008 (CLP)

Eye irritation, Cat. 2 - H319 Causes serious eye irritation.

MAIN HARMFUL EFFECTS

The product causes irritation when in contact with eyes

When used in normal environments, according to correct usage conditions, the product does not present specific hazards.

2.2 LABEL ELEMENTS

Label compliant with EC Regulation No. 1272/2008

HAZARD PICTOGRAMS

WARNINGS

Attention

HAZARD STATEMENTS

H319 Causes serious eye irritation.

PRECAUTIONS

(P102 Keep out of the reach of children.)

(P103 Read label before using.)

P264 Wash skin thoroughly after use.

P280 Wear protective gloves/eye protection/face protection.

P305 + P351 + P338 IN CASE OF CONTACT WITH EYES: Rinse thoroughly with water for several minutes.

Remove contact lenses, if it is easy to do. Continue to rinse.

(P101 Where a doctor's visit is required, bring along the container or label.)

2.3 OTHER HAZARDS

No other known hazards

Employers must respect legal conditions in force relative to "risk assessment" to protect the health and safety of employees.

The mixture does not meet PBT/vPvB criteria as per Regulation (EC) 1907/2006, attachment XIII, based upon the information available on components.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

Not applicable

3.2 MIXTURES

This product is a mixture of substances. Substances classified as dangerous are listed below together with their concentration (Range set by RECOMMENDATION EEC 89/542), with their symbols/hazard signals and assigned H phrases.

Substances	REACH Reg. No.	Content %	Classification	Specific limits concentration
n. CAS	1999/45/CE	Content /0	UE-CLP CE 1272/2008	Specific mines concentration
n. EINECS	1999/45/CE		UE-CLF CE 12/2/2008	
Sodium carbonate	01-2119485498-	5-15	Eye Irrit. 2 H319	n.d.
497-19-8	19-xxxx			
207-838-8				
Sodium percarbonate	01-2119457268-	5-15	Acute Tox. 4 H302	>= 25%
15630-89-4	30-xxxx		Eye dam. 1 H318	Acute Tox. 4 H302
239-707-6			Ox. Sol. 3 H272	Eye dam. 1 H318
				Ox. Sol. 3 H272
				10 -< 25%
				Eye Irrit. 2 H319
Sodium alkyl sulphate	01-2119490225-	<1	Skin irrit. 2 H315	n.d.
68955-19-1	39-xxxx		Eye dam. 1 H318	
273-257-1				

Chemical composition and/or mixture concentration, intellectual property of Asachimici.

The complete H phrase test is documented in section 16.

4 FIRST AID MEASURES

4.1 FIRST AID MEASURES DESCRIPTION

GENERAL MEASURES: where discomfort is experienced, consult a physician. Show the physician the present safety data sheet.

INHALATION: remove the injured person from the danger zone to a well-ventilated room; if any symptoms of discomfort should occur, seek medical advice.

CONTACT WITH SKIN: rinse the skin immediately using plenty of water and change clothing where necessary. If irritation persists or tissue damage occurs, consult a physician.

CONTACT WITH EYES: remove any contact lenses. Rinse immediately using plenty of water and with eyelids open for at least 10 minutes. Where discomfort persists, immediately consult an ophthalmologist.

INGESTION: Never administer anything orally where the victim is not conscious; rinse the mouth; make sure the person drinks plenty of water; consult a physician.

4.2 MAIN SYMPTOMS, BOTH ACUTE AND DELAYED

See section 11.

4.3 INDICATION OF IMMEDIATE NEED FOR MEDICAL ATTENTION AND SPECIFIC TREATMENTS

See section 4.1.

5 FIRE MEASURES

5.1 EXTINGUISHERS

The product itself does not burn. Use water mist extinguishers, fire-fighting foam, powder, sand, Carbon dioxide (CO2).

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Possible formation of carbon monoxide

5.3 ADVICE FOR FIRE-FIGHTERS

To protect fire-fighters, suitable breathing protection means must be employed along with suitable protective equipment.

6 ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Intervention personnel must wear suitable personal protective equipment (overalls, gloves, goggles and dust mask). Personnel not trained to deal with emergency interventions must stay away from the area concerned.

6.2 ENVIRONMENTAL PRECAUTIONS

Comply with water protection standards (collect, control, cover). Do not place the product in the following areas: in surface water or drainage systems. In the instance where a large quantity of the product has leaked or caused contamination, the competent authorities must be informed.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Carefully collect the leaked product (better where aspirated) and using plenty of water, clean the affected area. Comply with current standards when disposing the non-reusable product.

6.4 REFERENCE TO OTHER SECTIONS

Where necessary, see sections 8 and 13.

7 HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Comply with precautions overseeing the handling of chemical products. Adequately ventilate areas; where necessary, use equipment which feature ventilation devices to stop powder filling up the air. Keep away from food and drinks. Avoid knocking and incorrect handling of packages which may cause the product to leak. During handling, ensure surroundings are clean and organised. Where powder is present, we recommend using suitable protective means: dust mask, gloves and goggles (see section 8).

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

The product must be stored in areas with alkali-resistant flooring, which are covered, dry, cool and ventilated. Keep the product away from heat sources, central heating (temperature must not exceed 20°C) and it must be shielded from the sun's rays. Keep packages securely closed after use and away from acidic, alkali products, reducing substances or mineral salts (see sections 10 and 14). There will be no decomposition where stored and used as indicated.

7.3 SPECIFIC END USERS

No specific recommendations available

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure threshold limit value: as there is no test data available on the component used in terms of professional exposure, we must consider the concentrations of the substances forming part of the preparation (see section 3) in order to assign an estimated value based upon and relative to individual characteristics and toxicological classifications.

Livello derivato senza effetto DNEL

Substances	Workers dermic acute	Workers inhalation long time effects	Consumers dermic acute	Consumers inhalation long time effects	Consumers ingestion long time effects
Sodium carbonate	nd	10 mg/m3	nd	10 mg/m3	nd
Sodium percarbonate	12,8 mg/cm2	5 mg/m3	6,4 mg/cm2	nd	nd
Sodium alkyl sulphate	4060 mg/Kg	285 mg/m3	2440 mg/Kg	85 mg/m3	24 mg/Kg

Concentrazione prevedibile priva di effetti PNEC

Substances	Water	Sea water	Depuration plants
Sodium carbonate	nd	nd	nd
Sodium percarbonate	0,035 mg/l	nd	16,24 mg/l
Sodium alkyl sulphate	0,098 mg/l	0,0098 mg/l	0,15 mg/l

8.2 EXPOSURE CONTROLS

- -RESPIRATORY PROTECTION: avoid inhaling powder. Use a dust mask in the presence of powder.
- -HAND PROTECTION: use rubber gloves (PVC, etc.).
- -EYE PROTECTION: avoid contact with eyes. Use protective, airtight goggles in the presence of powder.
- -SKIN PROTECTION: employ clothing which prevents direct contact between the powder and skin.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- -APPEARANCE: white powder
- -ODOUR: odourless
- -pH: (solution 1% in water) 10 ± 0.5
- -MELTING POINT/FREEZING POINT: n.d.
- -INITIAL BOILING POINT AND BOILING INTERVAL: n.d.
- -FLAMMABILITY POINT: n.d.
- -EVAPORATION RATE: n.d.
- -FLAMMABILITY (SOLIDS, GAS): n.a.
- -MAXIMUM/MINIMUM FLAMMABILITY LIMIT OR EXPLOSIVITY: n.a.
- -VAPOUR PRESSURE: n.d.
- -VAPOUR DENSITY: n.d.

-RELATIVE DENSITY: n.d. (apparent density approx 1.15 g/ml)

-SOLUBILITY: rapidly soluble in water. Approx. 20 g/L at 20°C

- N-OCTANOL/WATER PARTITION: n.d. -AUTOIGNITION TEMPERATURE: n.d. -DECOMPOSITION TEMPERATURE: n.d.

-VISCOSITY: n.a.

-EXPLOSIVE PROPERTIES: n.a. -OXIDISING PROPERTIES: n.d. **9.2 OTHER INFORMATION**

-No data available

10 STABILITY AND REACTIVITY

10.1 REACTIVITY

Avoid releasing the product in the environment and it is good practice to never mix substances and/or chemical preparations.

10.2 CHEMICAL STABILITY

The product is stable under recommended storage and handling conditions (see section 7).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

The alkaline content of the product reacts with acids (chemical reaction) and with substances which generate acids.

10.4 CONDITIONS TO AVOID

Avoid dust formation, heat sources and humidity.

10.5 INCOMPATIBLE MATERIALS

Avoid contact with humidity, strong acids, thin aluminium.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

The release of toxic vapours resulting from a fire or high temperatures may present risks.

11 TOXICOLOGICAL INFORMATION

As there is no test data available on the component, we must consider the concentrations of the substances forming part of the preparation (see section 3) in order to assess the toxicological effects arising from product exposure.

Substances	LD50 oral	LD50 skin	LC50 inhalation
Sodium carbonate	2800 mg/Kg	nd	2300 mg/m3
Sodium percarbonate	1034 mg/Kg	>2000 mg/Kg	n.d.
Sodium alkyl sulphate	>2000-<=5000 mg/Kg	>2000 mg/Kg	n.d.

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

-Acute toxicity, irritation and corrosiveness: according to our experience, the product has a high toxicity level in line with alkaline type products however in standard handling conditions, it presents hazards attributable to products classified as irritating, when in contact with eyes it offsets inflammatory conditions.

-Sensitization:

Substances	Exposition way	Species	Result
Sodium carbonate	skin	Buehler Test cavia	Not sensitizer
Sodium percarbonate	skin	Buehler Test cavia	Not sensitizer
Sodium alkyl sulphate	skin	OECD 406	Not sensitizer

-Toxicity upon repeated doses: n.a.

-Carcinogenicity:

Substances	Exposition way	Species	Risult
Sodium alkyl sulphate			Not cancerogenic for humans

-Mutagenicity:

Substances	Exposition way	Species	Risult
Sodium alkyl sulphate			Not mutagenic

-Toxicity upon reproduction:

Substances	Exposition way	Species	Risult
Sodium alkyl sulphate			Not Toxic upon
			reproduction

12 ECOLOGICAL INFORMATION

12.1TOXICITY

Use the preparation as per the methods and for the objectives specified. Use according to good working practices, avoiding disposal in the environment. Do not dispose in surface water or drainage systems. Do not dispose in the ground. As there is no ecotoxicology data available on this mixture, we refer to the toxicology information relative to the main substances in the mixture itself, described in section 3.

12.2 PERSISTENCE AND DEGRADABILITY

The surfactants in the product comply with biodegradability criteria established with EC REGULATION (EC) No. 648/2004 relative to detergents.

12.3 POTENTIAL FOR BIOACCUMULATION

N.D.

12.4 MOBILITY IN SOIL

N.D.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

The mixture, based upon the information available does not meet PBT and vPvB criteria.

12.6 OTHER ADVERSE EFFECTS

No adverse effects have been identified.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

When handling, comply with the protective precautions established (see sections 6, 7, 8).

Recover if possible. Small product quantities may be disposed of subject to suitable dilution in water, in sewage water purification systems, or may be overseen by specialist companies dealing with specialist refuse and/or industrial waste disposal, as authorised by designated authorities. Operate according to local and national regulations. Clear packages before disposing or recycling them in compliance with legislation in force overseeing such.

14 TRANSPORT INFORMATION

Different types of bags or drums may be used for packaging and transportation however they must always be made of polyethylene. Packages must always be correctly sealed to prevent deterioration and compression. During transportation, the correctly loaded packages, must be protected from the sun's rays and heat (keep cool as much as possible). When transporting, take care to protect the packages from the rain and bad weather (keep dry as much as possible). In the case of accidental loss, refer to the precautionary instructions described in section 6.

The product is not considered hazardous merchandise for both national and international transportation via roadways, railway, by sea and by air.

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS AND LEGISLATION SPECIFIC TO THE MIXTURE

Directive 67/548/EEC (Classification, Packaging, and Labelling of dangerous substances) and subsequent amendments;

Directive 99/45/EC (Classification, Packaging and Labelling of Dangerous Preparations) and subsequent amendments;

Regulation no. 1907/2006/EC (REACH);

Regulation no. 1272/2008/EC (CLP);

Regulation no. 790/2009/EC (amending, for the purposes of adaptation to technical and scientific progress, Regulation ATP no. 1272/2008/EC).

Legislative Decree 81/2008 (Consolidated Law on the protection of health and safety in the workplace) and subsequent amendments and Directive 2009/161/EU;

Regulation 648/2004/EC overseeing detergents and subsequent modifications;

Regulation 453/2010 (EU); standard overseeing the transportation of hazardous merchandise on road/railway: ADR/RID Agreement.

15.2 CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has not been completed on the mixture.

16 OTHER INFORMATION

- H -Phrase Test quoted in section 3 of the data sheet on individual components:
- -H272 May cause fire; oxidiser.
- -H302 Harmful if swallowed.
- -H315 Causes skin irritation.
- -H318 Causes serious eye damage.
- -H319 Causes serious eye irritation.

It is the responsibility of the user to take all the measures necessary to ensure compliance with local, national and EU standards.

Personnel medical checks: preventive and periodic personnel medical checks are a legal requirement.

The data provided is based on our knowledge up to the present day and is not considered to be exhaustive or binding. It is applicable to the product as per and in compliance with specifications. Our Company will not assume any legal responsibility arising from the use of such information or reliance upon the aforementioned. In no cases, will such information excuse the user from complying with all legislative, administrative and regulatory standards governing the product, in addition to health and safety standards in the workplace. Despite the information provided, such information being up-to-date at the time of the latest revision, we suggest users ensure the suitability and completeness of the aforementioned, primarily in relation to the specific use envisaged for the product in question. The application, use and modification of the preparation fall under the exclusive responsibility of the client. Read instructions and labels attached to packages before using.

The information described with this present data sheet complies with that prescribed by standards in force governing the hazardous substances described in section 15.

Owing to the numerous modifications, hence the reason for this revision, individual information which has been added, deleted or modified, has not been highlighted; this present data sheet entirely nullifies and replaces all previous versions.