

Safety Data Sheet.

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name

POWER

02173740362

POWER

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

Intended use

DETERGENT ONLY FOR INDUSTRIAL / PROFESSIONAL USING
CAR CLEANER DEGREASER DETERGENT

1.3. Details of the supplier of the safety data sheet

Name

AR-CO CHIMICA S.R.L.

Full address

Via Canalazzo 22/24

District and Country

41036 MEDOLLA (MO)

ITALY

Tel. +39 053558890

Fax +39 053558898

e-mail address of the competent person

responsible for the Safety Data Sheet

reach@arcochimica.it

Product distribution by

AR-CO CHIMICA

1.4. Emergency telephone number

For urgent inquiries refer to

Numeri telefonici dei principali Centri Antiveleni italiani (attivi 24/24 ore) Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda - Milano) (H24) Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo) Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze) Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma) Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli) AR-CO CHIMICA +39 053558890 (ORE UFFICIO / OFFICE HOURS 08:00-12:30 / 14:00-17:30)

2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Skin Corr. 1A

H314

Eye Dam. 1

H318

2.1.2. Directive 67/548/EEC and following amendments and adjustments.

Danger Symbols:

C

R phrases:

22-35

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor / physician.

Contains:

SODIUM HYDROXIDE
POTASSIUM HYDROXIDE
ETHANOLAMINE

2.3. Other hazards.

Information not available.

3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
SODIUM HYDROXIDE			
CAS. 1310-73-2	2 - 5	C R35	Met. Corr. 1 H290, Skin Corr. 1A H314
EC. 215-185-5			
INDEX. 011-002-00-6			
Reg. no. 01-2119457892-27-0000			
ETHANOLAMINE			
CAS. 141-43-5	3 - 5	C R34, Xn R20/21/22	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, STOT SE 3 H335
EC. 205-483-3			
INDEX. 603-030-00-8			
Reg. no. 01-2119486455-28-0000			
POTASSIUM HYDROXIDE			
CAS. 1310-58-3	2 - 5	C R35, Xn R22	Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1A H314

EC. 215-181-3

INDEX. 019-002-00-8

Reg. no. 01-2119487136-33-0000

BRANCHED ALKYL ALCOHOL (C11-C13)**ETHOXYLATES**

CAS. 68439-54-3

1 - 3

Xn R22, Xi R41

Acute Tox. 4 H302, Eye Dam. 1 H318

EC. 931-985-3

INDEX. -

Reg. no. NO REGISTRATION NUMBER (POLYMER)

(1-idrossietilidene) acido bisfosfonico, sale sodico

CAS. 3794-83-0

1 - 5

Xn R22, Xi R36

Acute Tox. 4 H302, Eye Irrit. 2 H319

EC. -

INDEX. -

Reg. no. 01-2119510382-52-0001

PENTABASIC SODIUM TRIPHOSPHATE

CAS. 7758-29-4

1 - 5

Xi R36/37/38

Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC. 231-838-7

INDEX. -

Reg. no. 01-2119430450-54

LAURYLDIMETHYLAMINE OXIDE

CAS. 1643-20-5

0,5 - 1

Xi R38, Xi R41, N R50

Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1

EC. 216-700-6

INDEX. -

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

4. First aid measures.

4.1. Description of first aid measures.

EYES: Wash immediately with plenty of water for at least 15 minutes and seek medical advice at once.

SKIN: Immediately take off all contaminated clothing and have a shower. Seek medical advice.

INGESTION: Have the patient drink water as much as possible and seek medical advice immediately. Do not induce vomiting before consulting a doctor.

INHALATION: Immediately seek medical advice. In the meantime, remove the patient to open air, far from the contaminated premises; if respiration stops or is difficult, give an artificial respiration adopting the proper measure for the helper.

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

For symptoms and effects caused by contained substances see chap. 11.

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

Information not available.

5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and antistatic), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage.

7.1. Precautions for safe handling.

Ensure that there is an adequate earthing system for the equipment and personnel.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Follow the instructions of the supplier. Store in a ventilated and dry place, far away from sources of ignition.

7.3. Specific end use(s).

Information not available.

8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

Predicted no-effect concentration - PNEC.

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

SODIUM HYDROXIDE

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
WEL		UK			2		INHAL.
OEL		IRL			2		
TLV-ACGIH					2 (C)		

ETHANOLAMINE

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
WEL		UK	2,5	1	7,6	3	SKIN
OEL		IRL	2,5	1	7,6	3	SKIN
OEL		EU	2,5	1	7,6	3	SKIN
TLV-ACGIH			7,5	3	15	6	

POTASSIUM HYDROXIDE

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
WEL		UK			2		INHAL.
OEL		IRL			2		
TLV-ACGIH					2 (C)		

BRANCHED ALKYL ALCOHOL (C11-C13) ETHOXYLATES

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	

(1-idrossietilidene) acido bisfosfonico, sale sodico

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	

Normal value in fresh water

Normal value in marine water

Normal value for fresh water
sediment

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	

LAURYLDIMETHYLAMINE OXIDE

Threshold Limit Value.	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	liquid
Colour	blue cobalt
Odour	TECHNICAL
Odour threshold.	Not available.
pH.	13,50 +/- 0,50
Melting or freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	Not available.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Specific gravity.	1,075 +/- 0,025
Solubility	IN ALL PROPORTIONS
Partition coefficient: n-octanol/water	Not available.
Ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
	Not available.

9.2. Other information.

Information not available.

10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

POTASSIUM HYDROXIDE: attacks aluminium, tin, lead and zinc. Reacts violently with acids.

ETHANOLAMINE: can react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong mineral acids, vinyl acetate, cellulose nitrate.

10.4. Conditions to avoid.

None in particular, however the usual precautions used for chemical products should be respected.

SODIUM HYDROXIDE: exposure to the air, moisture and sources of heat.

POTASSIUM HYDROXIDE: naked flames and heat.

ETHANOLAMINE: avoid exposure to air and sources of heat.

10.5. Incompatible materials.

SODIUM HYDROXIDE: strong acids, ammonia, zinc, lead, aluminium, water and flammable liquids.

POTASSIUM HYDROXIDE: Acids, metals, some plastics and rubber, water, halogenated hydrocarbons and maleic anhydride.

ETHANOLAMINE: iron, strong acids and strong oxidising agents.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

POTASSIUM HYDROXIDE: When boiled, it develops phosphine. Above decomposition temperature toxic potassium oxide fumes may develop.

ETHANOLAMINE: nitrogen oxides, carbon oxides.

11. Toxicological information.**11.1. Information on toxicological effects.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Vapour inhalation may moderately irritate the upper respiratory tract. Contact with skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

(1-idrossietilidene) acido bisfosfonico, sale sodico

LD50 (Oral). > 2850 mg/Kg

SODIUM HYDROXIDE

LD50 (Oral). 1350 mg/kg Rat

LD50 (Dermal). 1350 mg/kg Rat

POTASSIUM HYDROXIDE

LD50 (Oral). 333 mg/kg Rat

12. Ecological information.

12.1. Toxicity.

LAURYLDIMETHYLAMINE OXIDE

LC50 - for Fish.

1 mg/l/96h

(1-idrossietilidene) acido bisfosfonico, sale sodico

LC50 - for Fish.

> 300 mg/l/96h

EC50 - for Crustacea.

> 500 mg/l/48h

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in

their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class:	8	UN:	3266
Packing Group:	II		
Label:	8		
Nr. Kemler:	80		
Proper Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.		

Carriage by sea (shipping):

IMO Class:	8	UN:	3266
Packing Group:	II		
Label:	8		
EMS:	F-A, S-B		
Marine Pollutant:	NO		

Transport by air:

IATA:	8	UN:	3266
Packing Group:	II		
Label:	8		

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

None.

None.

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Ingredients according to Regulation (EC) No 648/2004

less than 5 % phosphates, phosphonates, anionic surfactants, amphoteric surfactants, non-ionic surfactants

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R20/21/22	HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R22	HARMFUL IF SWALLOWED.
R34	CAUSES BURNS.
R35	CAUSES SEVERE BURNS.
R36	IRRITATING TO EYES.
R36/37/38	IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
R38	IRRITATING TO SKIN.

R41 RISK OF SERIOUS DAMAGE TO EYES.

R50 VERY TOXIC TO AQUATIC ORGANISMS.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
13. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review:

The following sections were modified:

02 / 07 / 11 / 12.