

Safety Data Sheet

POWER CLEAN OUT



Safety Data Sheet dated 15/2/2017, version 5
This version cancels and substitutes any previous version

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: POWER CLEAN OUT

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

Recommended use:

HIGH PRESSURE CLEANSER FOR CONDENSERS

1.3. Details of the supplier of the safety data sheet

Company:

ERRECOM SRL

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it


1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

 Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

 Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H319 Causes serious eye irritation.

Precautionary statements:

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

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

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

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

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None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 20% - < 25%	ethanol; ethyl alcohol	Index number: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319
>= 20% - < 25%	propane	Index number: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9	2.2/1 Flam. Gas 1 H220 2.5 Press. Gas H280
>= 5% - < 7%	butane	Index number: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	2.2/1 Flam. Gas 1 H220 2.5 Press. Gas H280
>= 2.5% - < 5%	isobutane	Index number: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2	2.2/1 Flam. Gas 1 H220 2.5 Press. Gas H280
>= 2.5% - < 5%	propan-2-ol; isopropyl alcohol; isopropanol	Index number: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-21194575 58-25-XXXX	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336
>= 0.25% - < 0.5%	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CAS: 308062-28-4 EC: 931-292-6	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

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In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

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Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol; ethyl alcohol - CAS: 64-17-5

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

propane - CAS: 74-98-6

ACGIH - Notes: Asphyxia

butane - CAS: 106-97-8

ACGIH - STEL: 1000 ppm - Notes: CNS impair

isobutane - CAS: 75-28-5

ACGIH - STEL: 1000 ppm - Notes: CNS impair

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair

DNEL Exposure Limit Values

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Worker Professional: 11 mg/kg - Consumer: 5.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 6.2 mg/m³ - Consumer: 1.53 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.44 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Target: Fresh Water - Value: 0.0335 mg/l

Target: Marine water - Value: 0.00335 mg/l

Target: Freshwater sediments - Value: 5.24 mg/kg

Target: Marine water sediments - Value: 0.524 mg/kg

Target: Soil (agricultural) - Value: 1.02 mg/kg

Target: Aquatic, periodic release - Value: 0.0335 mg/l

Target: Microorganisms in sewage treatments - Value: 24 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

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Thermal Hazards:
None
Environmental exposure controls:
None
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	liquid colorless
Odour:	characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	0 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	0.8 g/mL @ 20°C
Solubility in water:	partial
Solubility in oil:	partial
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.
V.O.C. (w/w):	58,9 %

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions

10.2. Chemical stability
Stable under normal conditions

10.3. Possibility of hazardous reactions
None

10.4. Conditions to avoid
Store away from heat.

10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the product:
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- a) acute toxicity
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- b) skin corrosion/irritation
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- c) serious eye damage/irritation
Classification: The product is classified: Eye Irrit. 2 H319
- d) respiratory or skin sensitisation
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- f) carcinogenicity
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- g) reproductive toxicity
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- h) STOT-single exposure
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- i) STOT-repeated exposure
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met
- j) aspiration hazard
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

ethanol; ethyl alcohol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg Test: LC50 - Route: Inhalation - Species: Rat 120 mg/l - Duration: 4h
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
Test: LC50 - Route: Inhalation - Species: Mouse > 20 mg/l - Duration: 4h

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 4710 mg/kg Test: LD50 - Route: Skin - Species: Rat 12800 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat 76.2 mg/l - Duration: 4h
Test: LD50 - Route: Skin - Species: Rabbit 6290 mg/kg

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

a) acute toxicity:

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Test: LD50 - Route: Oral - Species: Rat 1064 mg/kg Test: NOAEL - Route: Oral -
Species: Rat 88 mg/kg/day
Test: LOAEL - Route: Skin - Species: Mouse 0.045
mg/cm²

- b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin Positive
 - c) serious eye damage/irritation:
Test: Eye Irritant Positive
 - d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin Negative
- ethanol; ethyl alcohol - CAS: 64-17-5
LD50 (RABBIT) ORAL: 6300 MG/KG
LD50 (RAT) ORAL SINGLE DOSE: 7060 MG/KG

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

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Classification: Not classified for environmental hazards

Considerations: Based on available data, the classification criteria are not met

Data:

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) Aquatic acute toxicity:

Endpoint: EC0 - Species: Fish 10000 mg/l - Duration h: 48 - Notes: Pimephales promelas

Endpoint: LC50 - Species: Fish > 1400 mg/l - Duration h: 96 - Notes: Lepomis macrochirus

Endpoint: LC50 - Species: Fish 6550 mg/l - Duration h: 96 - Notes: Pimephales promelas

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2.67 mg/l

Endpoint: EC50 - Species: Daphnia 3.1 mg/l

Endpoint: IC50 - Species: Algae 0.143 mg/l

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae 0.078 mg/l - Duration h: 72

12.2. Persistence and degradability

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

ethanol; ethyl alcohol - CAS: 64-17-5

Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.350000 - Duration: N.A. - Notes: N.A.

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.05 - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

ADR-UN number: 1950

IATA-Un number: 1950

IMDG-Un number: 1950

14.2. UN proper shipping name

ADR-Shipping Name: AEREOSOLS, flammable

IATA-Technical name: AEREOSOLS, flammable

IMDG-Technical name: AEREOSOLS, flammable (propane, ethanol)

N.A.

14.3. Transport hazard class(es)

ADR-Class: 2

ADR-Label: 2.1

IATA-Class: 2.1

IMDG-Class: 2.1

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

ADR-Tunnel Restriction Code: D

IATA-Passenger Aircraft: 203

IATA-Cargo Aircraft: 203

IMDG-Technical name: AEREOSOLS, flammable (propane, ethanol)

IMDG-EMS: F-D, S-U

N.A.

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

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

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Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3a

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H336 May cause drowsiness or dizziness.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas	2.5	Gases under pressure
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 15: Regulatory information

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr.	Classification procedure
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1272/2008	
Aerosols 1, H222+H229	On basis of test data
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.