



**Safety Data Sheet**  
**QUASAR**

**Safety Data Sheet dated 22/10/2018, version 3**

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

1.1. Product identifier

Mixture identification:

Trade name: QUASAR

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

Identified use:

Disinfectant for swimming pools and process water. Presidium Medical Surgery Reg. Ministero of Health No. 20230 of 20 June 2016.

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it

1.4. Emergency telephone number

Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

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**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)



Danger, Ox. Sol. 2, May intensify fire oxidiser..



Warning, Acute Tox. 4, Harmful if swallowed.



Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.



Danger, Eye Dam. 1, Causes serious eye damage.



Warning, Aquatic Acute 1, Very toxic to aquatic life.

EUH031 Contact with acids liberates toxic gas.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



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Danger

Hazard statements:

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

Precautionary statements:

P102 Keep out of reach of children.

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

P280 Wear protective gloves and eye/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents and container in accordance with applicable regulations.

Special Provisions:

EUH031 Contact with acids liberates toxic gas.

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains

calcium hypochlorite

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

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
>= 90%	calcium hypochlorite	Index 017-012-00-7 number: CAS: 7778-54-3 EC: 231-908-7 REACH No.: 01-21194870 05-40	 2.14/2 Ox. Sol. 2 H272  3.1/4/Oral Acute Tox. 4 H302  3.2/1B Skin Corr. 1B H314  4.1/A1 Aquatic Acute 1 H400 EUH031
< 1%	Inibitori di incrostazione		The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

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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.

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:

Rinse well your mouth

Do NOT induce vomiting.

Give nothing to eat or drink.

Immediately call a physician.

In case of Inhalation:

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

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

If breathing is irregular or stopped, administer artificial respiration.

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

Breathlessness.

Cough

Malaise.

Gastrointestinal disorders

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

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## SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Full jet water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

Powder

5.2. Special hazards arising from the substance or mixture

Combustion produces toxic gas (Chlorine).

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training.

Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

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## SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Prevent entry of foreign and unprotected personnel.

Do not touch or walk on spilled material.

Avoid breathing vapors or mists.

Provide adequate ventilation.

Use appropriate respiratory protection.

Wear personal protection equipment.

See protective measures under point 7 and 8.

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- 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.
- 6.3. Methods and material for containment and cleaning up  
Stop the escape if there is no risk. Move the containers from the spill area. Get closer to the source of overwhelming emission. Prevent spills in sewage systems, waterways, basements or restricted areas. Wash and convey the spilled amounts in a waste treatment plant.  
Collect with the shovel and place in suitable containers for disposal. Avoid dust formation. After cleaning each trace with water. Eliminate in compliance with the applicable standard.
- 6.4. Reference to other sections  
See also section 8 and 13

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**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.  
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  
Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from other incompatible materials (see section 10) and food and drink. Keep the container tight and sealed until use. Open containers should be carefully resealed and kept straight to avoid accidental spillage of the product. Do not store in labels without label.  
Keep away from combustible material and avoid contact with organic material.  
Do not eat, drink or smoke at the workplace. Foods and beverages should be consumed only in areas specifically identified after removing contaminated clothing and protective equipment and after washing your hands. Wash in any case hands after handling the substance / mixture.  
Store at room temperature in a ventilated place, away from direct sunlight and away from heat sources.  
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:  
Keep away from acids.  
Keep away from combustible materials.  
Instructions as regards storage premises:  
Cool and adequately ventilated.
- 7.3. Specific end use(s)  
See section 1.2.

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**SECTION 8: Exposure controls/personal protection**

- 8.1. Control parameters  
No occupational exposure limit available  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.
- 8.2. Exposure controls  
Eye/face protection:

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Eye glasses with side protection. EN166

Protection for skin:  
Protective suit.

Protection for hands:  
Gloves resistant to chemicals. EN 374

Respiratory protection:  
Respiratory protection necessary for the formation of dust. Filter device (EN 147). Type: B-P2, combined gas filters, inorganic (chlorine) vapors and particles; Color code: gray / white.

Thermal Hazards:  
Not applicable (the product is handled at room temperature)

Environmental exposure controls:  
Do not allow the product to be absorbed from the soil or from entering waterways or sewers. Do not let product enter drains. Discharge into the environment must be avoided.  
The product is toxic to the aquatic environment.

Appropriate engineering controls:  
Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Tablet/Granuli Bianchi	--	--
Odour:	Caratteristico di cloro	--	--
Odour threshold:	Not Available	--	--
pH:	11,0	--	--
Melting point / freezing point:	> 180 °C (decompone)	--	--
Initial boiling point and boiling range:	Not Available	--	--
Flash point:	Not Available	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	Può provocare accensione di materie combustibili.	--	--
Upper/lower flammability or explosive limits:	Not Available	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.3 g/cm3	--	--
Solubility in water:	180 g/cm3	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	Not applicable	--	--
Auto-ignition temperature:	Prodotto non autoinfiammabile	--	--
Decomposition temperature:	170-180 °C	--	--
Viscosity:	N.A.	--	--
Explosive properties:	Prodotto non	--	--

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	esplosivo		
Oxidizing properties:	Prodotto Oxidant	--	--

## 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

**SECTION 10: Stability and reactivity**

- 10.1. Reactivity  
Oxidizing properties.
- 10.2. Chemical stability  
Stable under recommended storage and handling. Please refer to section 7 of the MSDS.
- 10.3. Possibility of hazardous reactions  
Never mix this product with organic chlorine in the same container (Trichloro and Dichloro).  
Explosion hazard: alcohol, ethanol, organic substances, methanol.  
Intense reaction with: ammonium compounds, halogenated hydrocarbons, phenol, reducing agents, nitroderivatives, strong oxidants and flammable substances.
- 10.4. Conditions to avoid  
Do not mix with acids. It can be produced toxic gases (chlorine).
- 10.5. Incompatible materials  
Concentrated acids.  
Reducing agents.  
organic substances.
- 10.6. Hazardous decomposition products  
It decomposes in chlorine and oxygen if heated above 180 ° C.  
Toxic gases / vapors.

**SECTION 11: Toxicological information**

- 11.1. Information on toxicological effects  
Toxicological information of the product:  
QUASAR
  - a) acute toxicity  
The product is classified: Acute Tox. 4 H302
  - b) skin corrosion/irritation  
The product is classified: Skin Corr. 1B H314
  - c) serious eye damage/irritation  
The product is classified: Eye Dam. 1 H318
  - d) respiratory or skin sensitisation  
Not classified  
Based on available data, the classification criteria are not met
  - e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met
  - f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
  - g) reproductive toxicity  
Not classified



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- Based on available data, the classification criteria are not met
- h) STOT-single exposure  
Not classified  
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
- j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:  
calcium hypochlorite - CAS: 7778-54-3
- a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 850 mg/kg - Duration: 1h  
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Duration: 1h  
Test: LD50 - Route: Inhalation - Species: Rat = 1300 mg/l
- b) skin corrosion/irritation:  
Route: Skin Positive
- c) serious eye damage/irritation:  
Positive

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**SECTION 12: Ecological information**

- 12.1. Toxicity  
No information is available on the mixture as a whole. This is the information on eco-toxicological effects of the individual components.
- QUASAR  
The product is classified: Aquatic Acute 1 - H400  
calcium hypochlorite - CAS: 7778-54-3
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Bobwhite quail = 3474 mg/kg  
Endpoint: LC50 - Species: Daphnia = 0.11 mg/l - Duration h: 48  
Endpoint: LC50 - Species: Bluegill sunfish = 0.088 mg/l - Duration h: 96  
Endpoint: LC50 - Species: Rainbow trout = 0.16 mg/l - Duration h: 96
- 12.2. Persistence and degradability  
N.A.
- 12.3. Bioaccumulative potential  
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.

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**SECTION 14: Transport information**



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- 14.1. UN number  
 ADR-UN Number: 3487  
 IATA-UN Number: 3487  
 IMDG-UN Number: 3487
- 14.2. UN proper shipping name  
 ADR-Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water  
 IATA-Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water  
 IMDG-Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water
- 14.3. Transport hazard class(es)  
 ADR-Class: 5.1  
 ADR - Hazard identification number: 58  
 IATA-Class: 5.1  
 IATA-Label: 5.1 + 8  
 IMDG-Class: 5.1
- 14.4. Packing group  
 ADR-Packing Group: II  
 IATA-Packing group: II  
 IMDG-Packing group: II
- 14.5. Environmental hazards  
 ADR-Environmental Pollutant: Yes  
 IMDG-Marine pollutant: Marine Pollutant  
 Most important toxic component: calcium hypochlorite
- 14.6. Special precautions for user  
 ADR-Subsidiary risks: 8  
 ADR-S.P.: 314 322  
 ADR-Transport category (Tunnel restriction code): 2 (E)  
 IATA-Passenger Aircraft: 558  
 IATA-Subsidiary risks: 8  
 IATA-Cargo Aircraft: 562  
 IATA-S.P.: A136 A803  
 IATA-ERG: 5C  
 IMDG-EmS: F-H , S-Q  
 IMDG-Subsidiary risks: 8  
 IMDG-Stowage and handling: Category D SW1 SW11  
 IMDG-Segregation: SG35 SG38 SG49 SG53 SG60
- 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)



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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)  
 Regulation (EU) n. 2016/918 (ATP 8 CLP)  
 Regulation (EU) n. 2016/1179 (ATP 9 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:

No restriction.

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: E1

**15.2. Chemical safety assessment**

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

Substances for which a Chemical Safety Assessment has been carried out:

None

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**SECTION 16: Other information**

**For professional use.**

Full text of phrases referred to in Section 3:

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

EUH031 Contact with acids liberates toxic gas.

Hazard class and hazard category	Code	Description
Ox. Sol. 2	2.14/2	Oxidising solid, Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 9: Physical and chemical properties

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Ox. Sol. 2, H272	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Aquatic Acute 1, H400	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

Liability exclusion clause: 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.

For professional use.

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.

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