

Safety Data Sheet dated 10/12/2018, version 3

| SECTION 1: Identification of the substance/mixture and of the company/undertaking | |
|--|--|
| 1.1. Product identifier | |
| Mixture identification: | |
| Trade name: IPOCLOR 30 | |
| 1.2. Relevant identified uses of the substance or mixture and uses advised against | |
| Identified use: | |
| Chlorinating agent for aqueducts, swimming pools and water treatment plants in general. | |
| Uses advised against: | |
| Any other use different from the identified uses. | |
| 1.3. Details of the supplier of the safety data sheet | |
| Company: | |
| BARCHÉMICALS 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 | |
| | |
| SECTION 2: Hazards identification | |
| 2.1. Classification of the substance or mixture | |
| EC regulation criteria n°1272/2008 (CLP) | |
| Warning, Met. Corr. 1, May be corrosive to metals. | |
| Varing, Met. Con. 1, May be conside to metals. | |
| Danger, Skin Corr, 14, Causes severe skin burns and eve damage | |
| Danger, Skin Corr. 1A, Causes severe skin burns and eye damage. | |
| ^ | |
| Aquatic Chronic 2, Toxic to aquatic life with long lasting effects. | |
| | |
| Danger, Eye Dam. 1, Causes serious eye damage. | |
| Danger, Eye Dam. 1, Causes senous eye damage. | |
| | |
| Warning, Aquatic Acute 1, Very toxic to aquatic life. | |
| FUI 1024 Contract with paids liberates toxis res | |
| 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:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

Precautionary statements:

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

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

P303+P361+P353+P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a doctor.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

Special Provisions:

EUH031 Contact with acids liberates toxic gas.

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

Contains

sodium hypochlorite, solution ... % Cl active

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

A contatto con acidi libera gas tossico

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. Numb | er | Classification |
|-------------------|--|-------------|---------------------------------------|---|
| >= 10% - < 15% | sodium hypochlorite, solution % Cl active | | 7681-52-9 231-668-3 01-21194881 | 2.16/1 Met. Corr. 1 H290 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411 EUH031 |

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediatley and dispose off safely. After contact with skin, wash immediately with soap and plenty of water. OBTAIN IMMEDIATE MEDICAL ATTENTION.



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 opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth

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.

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

Inhalation produces a burning sensation, coughing, difficulty breathing and sore throat. Inhalation may cause pulmonary edema. The symptoms of lung edema do not see them often, until after a few hours and become more severe with physical exertion.

Contact with the skin produces redness, burning and pain.

Contact with the eyes produces redness, pain, severe deep burns and loss of vision. Ingestion causes severe irritation or chemical burns in the mouth, throat, esophagus and stomach.

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:

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

In case of contact with eyes, rinse immediately for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed, do not induce vomiting.

In case of inhalation seek medical advice immediately and show the container or label. In case of accident or if you feel unwell, seek medical advice immediately (show the instruction manual or the safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

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

Immediately solate 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment.



- Safety Data Sheet IPOCLOR 30
 - Eliminate all free flames and possible sources of ignition. Not smoking. Evacuate the surrounding areas. See protective measures under point 7 and 8.
 - 2 Environmental proceptions
 - 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

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

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.

Contamined 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. 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. Keep away from food, drink and feed.

Incompatible materials:

Keep away from acids.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s) See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- No occupational exposure limit available
- DNEL Exposure Limit Values
 - sodium hypochlorite, solution ... % Cl active CAS: 7681-52-9

Worker Professional: 3.10 03 - Consumer: 3.10 03 - Exposure: Human Inhalation -Frequency: Short Term, systemic effects - Endpoint: Repeated dose toxicity Worker Professional: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation -Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity Worker Professional: 3.10 03 - Consumer: 3.10 03 - Exposure: Human Inhalation -Frequency: Short Term, local effects - Endpoint: Repeated dose toxicity



Worker Professional: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation -Frequency: Long Term, local effects - Endpoint: Repeated dose toxicity mg/kg **PNEC Exposure Limit Values** sodium hypochlorite, solution ... % Cl active - CAS: 7681-52-9 Target: Fresh Water - Value: 0.00021 mg/l Target: Marine water - Value: 0.000042 mg/l Target: Microorganisms in sewage treatments - Value: 0.03 mg/l Target: Occasional issue. - Value: 0.000260 mg/l Target: Air - Value: 11.1 mg/l 8.2. Exposure controls Eye/face protection: Protective visor against liquid splashes (EN166). Recommended when there is a risk of spraying, spraying or spraying of liquid. Eye glasses with side protection.EN166 Protection for skin: Corrosive resistant apron. Clothing resistant to corrosive products CLASS I, EN 340 Neoprene rubber boots (EN 374). Protection for hands: Gloves resistant to chemicals. EN 374 Respiratory protection: Full facial mask with chlorine filter (EN14387). 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: | Liquid Yellow | | |
| Odour: | Pungente di | | |
| | cloro | | |
| Odour threshold: | Not Available | | |
| pH: | 12.5 | | at 20 °C |
| Melting point / freezing | Not Available | | |
| point: | | | |
| Initial boiling point and | > 100 °C | | at 760 mm Hg |
| boiling range: | | | |
| Flash point: | Not | | |
| | inflammable | | |
| Evaporation rate: | Not Available | | |
| Solid/gas flammability: | N.A. | | |
| Upper/lower flammability or | N.A. | | |
| explosive limits: | | | |
| Vapour pressure: | Not Available | | at 20 °C |
| Vapour density: | Not Available | | |
| Relative density: | 1.22 g/cm3 | | at 20 °C |



| Solubility in water: | Complete | |
|----------------------------|---------------|--------------|
| Solubility in oil: | Not Available | |
| Partition coefficient | Not Available | |
| (n-octanol/water): | | |
| Auto-ignition temperature: | Not Available | |
| Decomposition | 35 °C | |
| temperature: | | |
| Viscosity: | N.A. | at 20 °C |
| Explosive properties: | Prodotto non | |
| | esplosivo | |
| Oxidizing properties: | Not Available | |

9.2. Other information

| Properties | Value | Method: | Notes: |
|---------------------------|---------------|---------|--------|
| Miscibility: | Not Available | | |
| Fat Solubility: | N.A. | | |
| Conductivity: | Not Available | | |
| Substance Groups relevant | N.A. | | |
| properties | | | |

SECTION 10: Stability and reactivity

10.1. Reactivity

May be corrosive to metals.

The product is not pyrophoric.

10.2. Chemical stability

Stable under recommended storage and handling. Please refer to section 7 of the MSDS.

10.3. Possibility of hazardous reactions

Acids and Amines.

In presence of metals.

In the presence of combustible materials.

- 10.4. Conditions to avoid Keep away from heat sources. Avoid direct sunlight. Avoid contact with organic material.
- 10.5. Incompatible materials Concentrated acids. Ammine Metals and combustible materials.
- 10.6. Hazardous decomposition products Chlorine.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

- IPOCLOR 30
- a) acute toxicity
 - Not classified

Based on available data, the classification criteria are not met

- b) skin corrosion/irritation
 - The product is classified: Skin Corr. 1A H314
- c) serious eye damage/irritation
- The product is classified: Eye Dam. 1 H318
- d) respiratory or skin sensitisation



Safety Data Sheet **IPOCLOR 30** 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 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 i) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: sodium hypochlorite, solution ... % Cl active - CAS: 7681-52-9 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 1100 mg/kg - Source: Pubblicazione 1977 (ECHA) Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg Test: LC50 - Route: Inhalation - Species: Rat > 10.5 mg/l - Duration: 1h - Source: Study report 1962 (ECHA) - Notes: Oecd Guideline 403 (Acute inhalation Toxicity) e) germ cell mutagenicity: Test: Mutagenesis - Species: Rat Negative f) carcinogenicity: Test: Carcinogenicity - Species: Rat Negative

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.

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The product is classified: Aquatic Chronic 2 - H411; Aquatic Acute 1 - H400 sodium hypochlorite, solution ... % Cl active - CAS: 7681-52-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.060 mg/l - Duration h: 96 - Notes: ECHA Endpoint: EC50 - Species: Daphnia = 0.05 mg/l - Duration h: 48

Endpoint: IC50 - Species: Algae = 0.3 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



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. Additional disposal information:

Retrieve if possible. Send to authorized disposal plants or incineration under controlled conditions. Work according to local and national regulations. Recover if possible. Send to authorized disposal plants or for incineration under controlled conditions. Operate according to local and national regulations.

SECTION 14: Transport information



| 14.1. UN number | |
|--|-----------------------|
| ADR-UN Number: | 1791 |
| IATA-UN Number: | 1791 |
| IMDG-UN Number: | 1791 |
| 14.2. UN proper shipping name | |
| ADR-Shipping Name: | HYPOCHLORITE SOLUTION |
| IATA-Shipping Name: | HYPOCHLORITE SOLUTION |
| IMDG-Shipping Name: | HYPOCHLORITE SOLUTION |
| 14.3. Transport hazard class(es) | |
| ADR-Class: | 8 |
| ADR - Hazard identification nu | • |
| IATA-Class: | 8 |
| IMDG-Class: | 8 |
| 14.4. Packing group | 8 |
| ADR-Packing Group: | П |
| | |
| IATA-Packing group: | |
| IMDG-Packing group: | II |
| 14.5. Environmental hazards | |
| ADR-Enviromental Pollutant: | Yes |
| IMDG-Marine pollutant: | Marine Pollutant |
| 14.6. Special precautions for user | |
| ADR-Subsidiary risks: | - |
| ADR-S.P.: | 521 |
| ADR-Transport category (Tunr | , , , |
| IATA-Passenger Aircraft: | 851 |
| IATA-Subsidiary risks: | - |
| IATA-Cargo Aircraft: | 855 |
| IATA-S.P.: | A3 A803 |
| IATA-ERG: | 8L |
| IMDG-EmS: | F-A , S-B |
| IMDG-Subsidiary risks: | - |
| IMDG-Stowage and handling: | Category B |
| IMDG-Segregation: | "Away from" acids. |
| 14.7. Transport in bulk according to A | |
| N.A. | |
| | |

SECTION 15: Regulatory information

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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) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 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** 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

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- EUH031 Contact with acids liberates toxic gas.

| Hazard class and hazard category | Code | Description |
|----------------------------------|--------|---|
| Met. Corr. 1 | 2.16/1 | Substance or mixture corrosive to metals, Category 1 |
| Skin Corr. 1A | 3.2/1A | Skin corrosion, Category 1A |
| 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 |
| 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 9: Physical and chemical properties 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. 1272/2008 | Classification procedure |
|---|----------------------------|
| Met. Corr. 1, H290 | On basis of test data |
| Skin Corr. 1A, H314 | On basis of test data (pH) |
| Aquatic Chronic 2, H411 | Calculation method |
| Eye Dam. 1, H318 | On basis of test data (pH) |
| 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 guality.

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. |
| ATE: | Acute Toxicity Estimate |
| ATEmix: | Acute toxicity Estimate (Mixtures) |
| 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 Áviation Organization. |
| OR 30 | Barchemicals srl - società a socio unico - Sede Legale ed Operativa : Via S. Allende, 14 - 41051 Castelnuovo Rangone (MO) - Italy |



| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" |
|---------------|---|
| IMDG: | (ICAO). International Maritime Code for Dangerous Goods. |
| INCI: KSt: | International Nomenclature of Cosmetic Ingredients. 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. |