

Safety Data Sheet dated 25/9/2012, version 1



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Mixture identification:

Trade name: **DR 84 SUPER**

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

Inhibited acid-based liquid descaler

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

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

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

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

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

Warning, STOT SE 3, May cause respiratory irritation.

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xi Irritant

C Corrosive

R Phrases:

R34 Causes burns.

R37 Irritating to respiratory system.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

EC regulation criteria 1272/2008 (CLP)

Symbols:

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Solution for Water Treatment



Danger

Hazard statements:

- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.

Precautionary statements:

- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents

- phosphoric acid ... %, orthophosphoric acid ... %
- hydrochloric acid ... %

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Symbols:

C Corrosive

R Phrases:

- R34 Causes burns.
- R37 Irritating to respiratory system.

S Phrases:

- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contents

- phosphoric acid ... %, orthophosphoric acid ... %
- hydrochloric acid ... %

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

15% - 25% hydrochloric acid

Index number: 017-002-01-X, EC: 231-595-7

Xi,C; R34-37

3.2/1B Skin Corr. 1B H314

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⚠ 3.8/3 STOT SE 3 H335

10% - 20% phosphoric acid ... %, orthophosphoric acid ... %
Index number: 015-011-00-6, CAS: 7664-38-2, EC: 231-633-2
C; R34

⚠ 3.2/1B Skin Corr. 1B H314

0,25% - 1% Non ionic surfactants
Xn,Xi; R22-41

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.3/1 Eye Dam. 1 H318

4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of skin contact:

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.

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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting. Drink a lot of water.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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 fire-fighters

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.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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Solution for Water Treatment

Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
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

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
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

Storage at room condition and protect from direct light.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
OEL 8h: 1 mg/m³
OEL short: 2 mg/m³
TLV TWA: 0,25 ppm - 1 mg/m³
TLV STEL: 0,75 ppm - 3 mg/m³

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

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

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

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

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, e.g. CEN/FFP-2 or CEN/FFP-3.

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Thermal Hazards:

None

Environmental exposure controls:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance and colour:	Yellow liquid
Odour:	Characteristic
Odour threshold:	N.A.
pH:	0
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:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1.20 Kg/l
Solubility in water:	Complete
Lipid solubility:	N.A.
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.

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

Stable under normal conditions.

10.5. Incompatible materials

Concentrated Alkali.

10.6. Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

a) acute toxicity:

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Solution for Water Treatment

Test: LD50 - Route: Oral - Species: Rat = 1530 mg/kg
phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
LD50 (RABBIT) SKIN: 2740 MG/KG

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
Test: LC50 - Species: Fish - Duration h: 96 - mg/l: 138
Test: EC50 - Species: Daphnia - Duration h: 48 - mg/l: 265

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

Bioaccumulative: No

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

Il prodotto è nocivo per la vita acquatica in quanto abbassa fortemente il pH

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.

14. TRANSPORT INFORMATION



14.1. UN number

ADR-UN Number: 3264
IATA-UN Number: 3264
IMDG-UN Number: 3264

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ... %, orthophosphoric acid ... %, hydrochloric acid ... %)

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IATA-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ... %, orthophosphoric acid ... %, hydrochloric acid ... %)
IMDG-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ... %, orthophosphoric acid ... %, hydrochloric acid ... %)

14.3. Transport hazard class(es)

ADR-Class: 8
ADR - Hazard identification number: 80
IATA-Class: 8
IATA-Label: Corrosive
IMDG-Class: 8

14.4. Packing Group

ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II

14.5. Environmental hazards

ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special Precautions for User

ADR-Tunnel Restriction Code: (E)
IATA-Passenger Aircraft: 851
IATA-Cargo Aircraft: 855
IATA-ERG: 8L
IMDG-EmS: F-A , S-B
IMDG-Storage category: B
IMDG-Storage notes: Clear of living quarters.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

N.A.

15. REGULATORY INFORMATION

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions :

Regulation (EC) nr 648/2004 (Detergents).
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
1999/13/EC (VOC directive)

15.2. Chemical Safety Assessment

No

16. OTHER INFORMATION

Product for professional use

Full text of phrases referred to in Section 3:

R34 Causes burns.
R37 Irritating to respiratory system.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

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

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Solution for Water Treatment

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
 - CCNL - Appendix 1
- Insert further consulted bibliography

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.
- LTE: Long-term exposure.
- PNEC: Predicted No Effect Concentration.
- RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
- STE: Short-term exposure.
- STEL: Short Term Exposure limit.
- STOT: Specific Target Organ Toxicity.
- TLV: Threshold Limiting Value.
- TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
- WGK: German Water Hazard Class.

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