



Safety Data Sheet
SOLUZIONE F 21

Safety Data Sheet dated 6/8/2018, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: SOLUZIONE F 21

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

Identified use:

Detergent - Concentrated descaler for pH and Redox electrodes

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

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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)



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



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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P102 Keep out of reach of children.

P280 Wear protective gloves and eye/face protection.

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

Safety Data Sheet
SOLUZIONE F 21

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.

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

Special Provisions:

None

Contains

phosphoric acid ... %, orthophosphoric acid ... %

Non-ionic surfactants

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
>= 30% - < 40%	phosphoric acid ... %, orthophosphoric acid ... %	Index number: 015-011-00-6 CAS: 7664-38-2 EC: 231-633-2 REACH No.: 01-21194859 24-24	 2.16/1 Met. Corr. 1 H290  3.2/1B Skin Corr. 1B H314
>= 5% - < 10%	Non-ionic surfactants	CAS: 166736-08-9 REACH No.: 02-21196307 47-33	 3.1/4/Oral Acute Tox. 4 H302  3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures
4.1. Description of first aid measures
In case of skin contact:

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

Remove contaminated clothing immediately and dispose off safely.

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.

In case of Ingestion:

Rinse well your mouth

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

In case of Inhalation:

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.

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

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

Contact with the eyes produces redness, pain, severe deep burns and loss of vision.

Safety Data Sheet
SOLUZIONE F 21

Contact with the skin produces redness, burning and pain.

In case of accidental ingestion, it can cause abdominal pain and vomiting.

If inhaled it can cause the following symptoms: cough, labored breathing, sore throat and difficulty breathing.

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:

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

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

If swallowed, rinse mouth. Consult a doctor as soon as possible.

If inhaled, move the victim to fresh air and keep warm and at rest.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

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

Extinguishing media which must not be used for safety reasons:

Full jet water.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Avoid breathing vapors or mists.

Remove persons to safety.

Provide adequate ventilation.

Do not touch or walk on spilled material.

6.2. Environmental precautions

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

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.

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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Safety Data Sheet
SOLUZIONE F 21

- 7.2. Conditions for safe storage, including any incompatibilities
 Store at room temperature and away from direct sunlight.
 Keep away from food, drink and feed.
 Incompatible materials:
 See the next paragraph 10.
 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
 phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
 EU - TWA(8h): 1 mg/m³ - STEL: 2 mg/m³
 ACGIH - TWA(8h): 1 mg/m³ - STEL: 3 mg/m³ - Notes: URT, eye and skin irr
- DNEL Exposure Limit Values
 phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
 Worker Professional: 1 03 - Consumer: 0.73 03 - Exposure: Human Inhalation -
 Frequency: Long Term, local effects - Endpoint: Repeated dose toxicity
 Worker Professional: 2 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects
- PNEC Exposure Limit Values
 N.A.
- 8.2. Exposure controls
 Eye/face protection:
 Basket eye glasses.
- Protection for skin:
 Protective apron.
 Chemical protection clothing.
- Protection for hands:
 Rubber gloves.
- Respiratory protection:
 Not necessary in normal use.
- 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.
- Appropriate engineering controls:
 Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.
 Predict the presence of showers and eye wash fountains at 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 Colorless	--	--
Odour:	Odorless	--	--
Odour threshold:	Not Available	--	--
pH:	< 1	--	--
Melting point / freezing point:	Not applicable	--	--
Initial boiling point and	Not Available	--	--

Safety Data Sheet
SOLUZIONE F 21

boiling range:			
Flash point:	Not applicable	--	--
Evaporation rate:	Not Available	--	--
Solid/gas flammability:	Not applicable	--	--
Upper/lower flammability or explosive limits:	Not applicable	--	--
Vapour pressure:	Not Available	--	--
Vapour density:	Not Available	--	--
Relative density:	1.12 Kg/l	--	--
Solubility in water:	Complete	--	--
Solubility in oil:	Not Available	--	--
Partition coefficient (n-octanol/water):	Not Available	--	--
Auto-ignition temperature:	Not Available	--	--
Decomposition temperature:	Not Available	--	--
Viscosity:	Not Available	--	--
Explosive properties:	Prodotto non esplosivo	--	--
Oxidizing properties:	Not Available	--	--

9.2. Other information

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

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions.
- 10.2. Chemical stability
Stable under recommended storage and handling. Please refer to section 7 of the MSDS.
- 10.3. Possibility of hazardous reactions
No hazardous reactions when stored and handled properly.
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
No one in particular.
- 10.6. Hazardous decomposition products
None under normal conditions of storage and use.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
SOLUZIONE F 21
- 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

Safety Data Sheet
SOLUZIONE F 21

- 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
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:
phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 2600 mg/kg - Notes: EQUIVALENTE AL OECD 423
Test: LD50 - Route: Skin - Species: Rabbit = 2740 mg/kg - Source: BIOFAX IND. 2000 (ECHA)
 - b) skin corrosion/irritation:
Test: Skin Corrosive - Species: Rabbit Yes - Source: STUDY REPORT 1980 (ECHA) - Notes: 1500.41 IN THE FEDERAL REGISTER VOL. 38
 - c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Yes - Source: STUDY REPORT 1971 (ECHA) - Notes: CODE OF FEDERAL REGULATIONS
 - e) germ cell mutagenicity:
Test: Mutagenesis No - Source: STUDY REPORT 2010 (ECHA) - Notes: UNITED KINGDOM ENVIRONMENTAL MUTAGEN SOCIETY
 - g) reproductive toxicity:
Test: Reproductive Toxicity - Species: Rat No - Source: STUDY REPORT 2008 (ECHA)
- Non-ionic surfactants - CAS: 166736-08-9
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 300 mg/kg
 - b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Negative
 - c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Positive
Test: Eye Corrosive - Species: Rabbit Positive
- phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2
LD50 (RABBIT) SKIN: 2740 MG/KG

SECTION 12: Ecological information

Safety Data Sheet
SOLUZIONE F 21

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.

SOLUZIONE F 21

Not classified for environmental hazards

Based on available data, the classification criteria are not met
phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 75.1 mg/l - Duration h: 96 - Notes: ECHA - OECD GUIDELINE 203 (FISH, ACUTE TOXICITY TEST)

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: OECD GUIDELINE 202 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72

Non-ionic surfactants - CAS: 166736-08-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Brachydanio rerio > 10 mg/l - Duration h: 96 - Notes: OECD - linea guida 203

Endpoint: EC50 - Species: Daphnia > 10 mg/l - Duration h: 48

Endpoint: EC50 - Species: Scenedesmus subspicatus > 10 mg/l - Duration h: 72 - Notes: OECD - linea guida 201

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

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

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: 1760

IATA-UN Number: 1760

IMDG-UN Number: 1760

14.2. UN proper shipping name

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

Safety Data Sheet
SOLUZIONE F 21

IATA-Shipping Name:	CORROSIVE LIQUID, N.O.S. (phosphoric acid ... %, orthophosphoric acid ... %)
IMDG-Shipping Name:	CORROSIVE LIQUID, N.O.S. (phosphoric acid ... %, orthophosphoric acid ... %)
14.3. Transport hazard class(es)	
ADR-Class:	8
ADR - Hazard identification number:	88
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8
14.4. Packing group	
ADR-Packing Group:	I
IATA-Packing group:	I
IMDG-Packing group:	I
14.5. Environmental hazards	
ADR-Environmental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
ADR-Subsidiary risks:	-
ADR-S.P.:	274
ADR-Transport category (Tunnel restriction code):	1 (E)
IATA-Passenger Aircraft:	850
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	854
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:	Clear of living quarters.
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)
 - 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:
 - Restriction 3
 - Restrictions related to the substances contained:
 - No restriction.

Safety Data Sheet
SOLUZIONE F 21

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
- None

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.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
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

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
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

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.

Safety Data Sheet
SOLUZIONE F 21

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.