SECTION1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code : BAGNO INDURITORE - HARDENER BATH
Trades code : BWINDUR

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

Photographic Process
Sectors of use:
Professional use[SU22]
Uses advised against
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

BELLINI FOTO S.r.l.
VIA FERRIERA, 68 - 06089 - TORGIANO - PERUGIA
ITALY
Tel +39 075 985 174 Fax +39 075 985 288

E-mail:info@bellinifoto.it - Web: www.bellinifoto.it
E-mail technical assistance: enrico.pompili@bellinifoto.it

Produced by
BELLINI FOTO S.r.L.
Via Ferriera, 68 06089 TORGIANO - PG - ITALY Tel. +39 075 985174

1.4. Emergency telephone number

Bellini Foto S.r.l. (PG) - Tel . +39 075 985 174

SECTION2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:
Pictograms:
None
Hazard Class and Category Code(s):
Nonhazardous
Hazard statement Code(s):
Nonhazardous

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:
Pictogram, Signal Word Code(s):
None
Hazard statement Code(s):
Nonhazardous
Supplemental Hazard statement Code(s):
EUH210 - Safety data sheet available on request.
Precautionary statements:
None in particular.

2.3. Other hazards

It Contains :

Boric acid - SVHC
No information on other hazards

SECTION3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements
Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Acetic acid 80 % Note: B	> 5 <= 10%	Skin Corr. 1A, H314	607-002-00-6	64-19-7	200-580-7	01-2119475 328-30
Boric acid - SVHC	> 1 <= 5%	Repr. 1B, H360FD	005-007-00-2	10043-35-3	233-139-2	01-2119486 683-25

SECTION4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.
Direct contact with skin (of the pure product).:
Wash thoroughly with soap and running water.
Direct contact with eyes (of the pure product).:
Wash immediately and thorougly with running water for at least 10 minutes.
Ingestion:
Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

No data available.

SECTION5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.
Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke
Wear gloves and protective clothing
6.1.2 For emergency responders:
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the the authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.
6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved
6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
At work do not eat or drink.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and `direct exposure of sunlight.

7.3. Specific end use(s)

Professional use:
Photographic and cinematographic treatment

SECTION8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
Acetic acid 80 %:
ACETIC ACID ...%; No. CAs: 64-19-7
Type of limit value (country of origin): TWA (EC)
Limit value: 10 ppm/25 mg/m3
- Substance: Acetic acid 80 %
DNEL
Systemic effects Long term Workers inhalation = 25 (mg/m3)
Systemic effects Long term Consumers inhalation = 25 (mg/m3)
Systemic effects Short term Workers inhalation = 25 (mg/m3)
Systemic effects Short term Consumers inhalation = 25 (mg/m3)
PNEC
Sweet water = 3,058 (mg/l)
sediment Sweet water = 11,36 (mg/kg/sediment)
Sea water = 0,3058 (mg/l)
sediment Sea water = 1,136 (mg/kg/sediment)
intermittent emissions = 30,58 (mg/l)
STP = 85 (mg/l)
ground = 0,47 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:
Professional use:
Not established
Individual protection measures:
(a) Eye / face protection
Not needed for normal use.
(b) Skin protection
(i) Hand protection
When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)
(ii) Other
Wear normal work clothing.
(c) Respiratory protection
Not needed for normal use.
(d) Thermal hazards
No hazard to report
Environmental exposure controls:
Related to contained substances:
Acetic acid 80 %:
For the selection of suitable gloves more, see the class that owns the pericolosit preparation (section 2), refer to the risk assessment carried out by you and, where appropriate, see also the supplier of choice for the most protective material appropriate. Avoid contact with skin when handling the substance / preparation or a mixture of protective gloves and protective clothing appropriate to the risk of 'transaction. Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact:
Material Thickness
Nitrile rubber curing time> = 0.38 mm> 480 min
Neoprene> = 0.65 mm> 240 min
Butyl rubber> = 0.36 mm> 480 min

Do not get this chemical enter the environment.

SECTION9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Liquid	
Odour	Light of vinegar	
Odour threshold	undefined	
pH	2.30 a 27°C	pH METRO
Melting point/freezing point	Irrilevant	
Initial boiling point and boiling range	Not determined	
Flash point	non flammable	ASTM D92
Evaporation rate	Not determined	
Flammability (solid, gas)	Irrilevant	
Upper/lower flammability or explosive limits	undefined	
Vapour pressure	Not determined	
Vapour density	Not determined	
Relative density	in water	
Solubility	in water	
Water solubility	Complete	
Partition coefficient: n-octanol/water	Not determined	
Auto-ignition temperature	Not determined	
Decomposition temperature	Not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

No data available.

SECTION10. Stability and reactivity

10.1. Reactivity

Related to contained substances:
Acetic acid 80 %:
The corrosive product, can lead to dangerous reactions.
Boric acid:
No data available

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate flammable gases in contact with dithiocarbamates, mercaptans and other organic sulfides, primary metals, strong reducing agents.
It can generate toxic gases to contact with inorganic fluoride, halogenated organic substances, sulfide, nitrides, nitrile, organophosphate, strong oxidants agents.
It can ignite in contact with ditiocarbamate, elementary metals, nitrides.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = ∞
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞
(a) acute toxicity: based on available data, the classification criteria are not met.
(b) skin corrosion/irritationAcetic acid 80 %: Skin irritation (OECD 404): irritant (rat)
(c) serious eye damage/irritation: Acetic acid 80 %: Eye irritation (OECD 405): corrosive (determined on rabbit eyes)
(d) respiratory or skin sensitization: Acetic acid 80 %: No sensitizing effects known.
(e) germ cell mutagenicity: Acetic acid 80 %: No known mutagenic, carcinogenic or reprotoxicants.
(f) carcinogenicity: Acetic acid 80 %: No known mutagenic, carcinogenic or reprotoxicants.
(g) reproductive toxicity: Acetic acid 80 %: Parameter: NOAEL (fetal development) (acetic acid ...%; No. CAs: 64-19-7)
Route of exposure: rabbit
Effective dose: 1600 mg/kg bw/day
Boric acid: Alleged toxic for human reproduction
(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) repeated exposurebased on available data, the classification criteria are not met.
(j) aspiration hazard: based on available data, the classification criteria are not met.
Related to contained substances:
Acetic acid 80 %:
Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals:
Acute oral toxicity (LD50): 9194 mg/kg (Rat) (Calculated value for the mixture).
Acute dermal toxicity (LD50): 2944 mg/kg (Rabbit) (Calculated value for the mixture).
Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Acetic acid]. Mutagenic for bacteria and/or yeast. [Acetic acid].
Contains material which may cause damage to the following organs: kidneys, mucous membranes, skin, teeth.
Other Toxic Effects on Humans:
Extremely hazardous in case of inhalation (lung corrosive).
Very hazardous in case of skin contact (irritant), of ingestion, .
Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans:
May affect genetic material and may cause reproductive effects based on animal data. No human data found.

(Acetic acid)
Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Extremely irritating and corrosive. Causes skin irritation (reddening and itching, inflammation). May cause blistering , tissue damage and burns.
Eyes: Extremely irritating and corrosive. Causes eye irritation, lacrimation, redness, and pain. May cause burns, blurred vision, conjunctivitis, conjunctival and corneal destruction and permanent injury.
Inhalation: Causes severe respiratory tract irritation. Affects the sense organs (nose, ear, eye, taste), and blood. May cause chemical pneumonitis, bronchitis, and pulmonary edema. Severe exposure may result in lung tissue damage and corrosion (ulceration) of the mucous membranes. Inhalation may also cause rhinitis, sneezing, coughing, oppressive feeling in the chest or chest pain, dyspnea, wheezing, tachypnea, cyanosis, salivation, nausea, giddiness, muscular weakness.
Ingestion: Moderately toxic. Corrosive. Causes gastrointestinal tract irritation (burning and pain of the mouth, throat, and abdomen, coughing, ulceration, bleeding, nausea, abdomial spasms, vomiting, hematemesis, diarrhea. May Also affect the liver (impaired liver function), behavior (convulsions, giddines, muscular weakness), and the urinary system - kidneys (Hematuria, Albuminuria, Nephrosis, acute renal failure, acute tubular necrosis). May also cause dyspnea or asphyxia. May also lead to shock, coma and death.
Chronic Potential Health Effects:
Chronic exposure via ingestion may cause blackening or erosion of the teeth and jaw necrosis, pharyngitis, and gastritis. It may also behavior (similar to acute ingestion), and metabolism (weight loss).
Chronic exposure via inhalation may cause asthma and/or bronchitis with cough, phlegm, and/or shortness of breath . It may also affect the blood (decreased leukocyte count), and urinary system (kidneys).
Repeated or prolonged skin contact may cause thickening, blackening, and cracking of the skin. (Acetic acid)
LD50 (rat) Oral (mg/kg body weight) = 3530
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 4960
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5620
Boric acid:
Hazardous to health effects:
For eye contact: irritation.
Ingestion: may cause nausea, vomiting, intestinal disorders.
For absorption in large quantity: ansiet, ataxia (coordination disorders in the motricit system), fatigue, cramps, change in body temperature.
Do not scartono other hazardous characteristics. Keep the usual precautions when handling chemicals.
Pu reduce fertility.
Pu harm to the unborn child.
Toxic to reproduction category 2
LD50 (rat) Oral (mg/kg body weight) = 2660

SECTION12. Ecological information

12.1. Toxicity

Related to contained substances:
Acetic acid 80 %:
LC50: Oncorhynchus mykiss Fish > Value mg/l for 300.82. test: 96 h
EC50 Daphnia: Daphnia magna > Value mg/l for 300.82. test: 48 h
Alga Skeletonema costatum EC50: > Value mg/l for 300.82. test: 72 h
Boric acid:
EC test 50 (mg/l):
Fish (Gambusia affinis) = 5600 mg/l/96 h; 1800 mg/l/12:00 am; Classification: highly toxic
Plants (B) = 1 mg/l; Classification: highly toxic
Use according to good working practices, avoiding release of the product in the environment.
Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:
Acetic acid 80 %:
Biodegrades, aerobically and anaerobically, both in water and on the ground.
Carboxylic acids are generally resistant to hydrolysis in aqueous medium.
Boric acid:

No data available

12.3. Bioaccumulative potential

Related to contained substances:
Acetic acid 80 %:
Has low potential for bioconcentration
Boric acid:
No data available

12.4. Mobility in soil

Related to contained substances:
Acetic acid 80 %:
Mobility has ground between moderate and very high. Pu volatilize from the soil.
Do not evaporate from damp and wet. There is atmosphere in vapour phase.
Boric acid:
No data available

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

SECTION13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Operate according to local or national regulations

SECTION14. Transport information

14.1. UN number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

It is not intended to carry bulk

SECTION15. Regulatory information

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

Legislative Decree. 02/03/1997 n. 52 (Classification, packaging and labeling of dangerous substances). Legislative Decree 14/03/2003 n. 65 (Classification, packaging and labeling of dangerous substances). Legislative Decree. 02/02/2002 n. 25 (Risks related to chemical agents at work). D.M. 26/02/2004 Work (Exposure Limits Professional); D.M. 03/04/2007 (Implementation of Directive n. 2006/8 / EC). Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) 790 / 2009.D.Lgs. September 21, 2005 n. 238 (Seveso Ter).

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3
H314 = Causes severe skin burns and eye damage.
H360FD = May damage fertility. May damage the unborn child.
Classification based on data of all mixture components
Main normative references:
Directive 1999/45/EC
Directive 2001/60/EC
Regulation 1272/2008/EC
Regulation 2010/453/EC
Regolamento529/2012 and subsequent updates
This data sheet cancels and replaces any previous edition.