

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

1.1. Product identifier

Product code : Ipoclorito di Sodio 14-15%
Trades code : A30-005
Product line: Tintolav

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

Chlorine-based bleach
Sectors of use:
Industrial Manufacturing[SU3]

Uses advised against
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112
Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266
London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

CAS 7681-52-9 CEE 017-011-00-1 EINECS 231-668-3

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS05, GHS09

Hazard Class and Category Code(s):
Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1

Hazard statement Code(s):
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H400 - Very toxic to aquatic life. (1)
H410 - Very toxic to aquatic life with long lasting effects. (1)

Corrosive product: causes severe skin burns and eye damage.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product is dangerous for the environment as it is very toxic to aquatic organisms
The product is dangerous to the environment as it is very toxic to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS05, GHS09 - Danger



Hazard statement Code(s):
H314 - Causes severe skin burns and eye damage.
H410 - Very toxic to aquatic life with long lasting effects. (1)

Supplemental Hazard statement Code(s):
EUH031 - Contact with acids liberates toxic gas.

Precautionary statements:

Prevention

- P260 - Do not breathe fume/vapours.
- P264 - Wash your hand thoroughly after handling.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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/doctor/physician

Disposal

- P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:

Sodium Hypochlorite , sodium hydroxide

Contains (Reg.EC 648/2004):

15% < 30% chlorine-based bleaching agents

For professional use only

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION 3. 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	Classification	Index	CAS	EINECS	REACH
Sodium Hypochlorite Note: B	> 10 <= 20%	EUH031; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 100 100	017-011-00-1	7681-52-9	231-668-3	01-2119488 154-34
sodium chlorate	> 1 <= 5%	Ox. Sol. 1, H271; Acute Tox. 4, H302; Aquatic Chronic 2, H411	017-005-00-9	7775-09-9	231-887-4	01-2119474 389-23
sodium hydroxide	> 1 < 2%	Skin Corr. 1A, H314	011-002-00-6	1310-73-2	215-185-5	

SECTION 4. 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):

Take contaminated clothing Immediately off.
In case of contact with skin, wash immediately with water and soap.
Consult a physician immediately

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Drink water with egg white; do not give bicarbonate.
Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

Immediately call a POISON CENTER/doctor/physician

SECTION 5. 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

SECTION 6. 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 mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing. Suitable: LaTeX, nitrile, PVC.

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 authorities.

Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Wear protective gloves/protective clothing/eye protection/face protection.

In residential areas do not use on large surfaces.

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)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

Sodium Hypochlorite:
Acute hazards/symptoms INHALATION cough. Sore throat.
SKIN Redness. Pain.
EYE Redness. Pain.
SWALLOWED, abdominal pain. Burning sensation. Cough. Diarrhea. Sore throat. Vomiting.

Specification: DNEL (EC): short term systemic effects Inhalation Value Workers: 3.1 mg/m³
Specification: DNEL (EC) parameter: local effects short term Inhalation Value Workers: 3.1 mg/m³
Specification: DNEL (EC) parameter: long term systemic effects Inhalation Workers value: 1.55 mg/m³
Specification: DNEL (EC): Short local effects Parameter termine Inhalation Value Population: 3.1 mg/m³
Specification: DNEL (EC) parameter: long term systemic effects Inhalation Population value: 1.55 mg/m³ specification:
DNEL (EC) parameter: oral value: 0.26 mg/kg specification: PNEC STP (EC): value of 0.03 mg/l specification: PNEC
(EC): intermittent Emission Parameter value: 0.26 Ng/l
Specification: PNEC (EC): Parameter Value Oral: 11.1 mg/kg
Specification: PNEC (EC): freshwater Parameter value: 0.21 Ng/l specification: PNEC (EC): seawater Parameter value:
0.042 Ng/l

sodium chlorate:
ACGIH: OELs (8-hour TLV-TWA) for inhalable dust: 10 mg/m³; respirable dust 3 mg/m³.
OSHA: OELs (8-hour PEL) for total dust: 15 mg/m³; respirable dust 5 mg/m³.

sodium hydroxide:
TLV: 2 mg/m³ (valore Ceiling) (ACGIH 2004).
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL: 2 mg/m³

- Substance: Sodium Hypochlorite
DNEL
Systemic effects Long term Workers inhalation = 1,55 (mg/m³)
Systemic effects Long term Consumers inhalation = 1,55 (mg/m³)
Systemic effects Short term Workers inhalation = 3,1 (mg/m³)
Systemic effects Short term Consumers oral = 0,26 (mg/kg bw/day)
Local effects Short term Workers inhalation = 3,1 (mg/m³)
Local effects Short term Consumers inhalation = 3,1 (mg/m³)
PNEC
sediment Sweet water = 0,21 (mg/kg/sediment)
Sea water = 0,042 (mg/l)
intermittent emissions = 0,26 (mg/l)
STP = 0,03 (mg/l)

8.2. Exposure controls



Appropriate engineering controls:
Industrial Manufacturing:
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection
Wear mask

(b) Skin protection

(i) Hand protection

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.

Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact

Material: nitrile rubber
minimum thickness: 0.11 mm
permeation time: 480 min

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection
Use adequate protective respiratory equipment (EN 14387:2008)

(d) Thermal hazards
No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Light yellow liquid	
Odour	characteristic	
Odour threshold	not determined	
pH	11 (dil. 5%); 13 (dil10 e 15%)	
Melting point/freezing point	18 °C	
Initial boiling point and boiling range	111 °C	
Flash point	nonflammable	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	irrelevant	

Physical and chemical properties	Value	Determination method
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	17,4 - 20 hPa @ 20 °C	
Vapour density	not determined	
Relative density	1,1 (dill 5%) - 1,21 (dil 14)	
Solubility	miscible in water	
Water solubility	293 gr/l	
Partition coefficient: n-octanol/water	-3,420	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	6,2 - 6,6 mPa.s	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 0,00 %

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

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 toxic gases to contact with acids, amide, aliphatic and aromatic amines, carbamate, halogenated substances, isocyanetic, organic sulfide, nitrile, organic phosphates, inorganic sulfide, polymerizable compounds.
It can be easy ignite in contact with other substances.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 24.489,8 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritation Corrosive product: causes severe skin burns and eye damage.
sodium chlorate: Skin-rabbit score: mild skin irritation-12:00 am
- (c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
sodium chlorate: Eyes-rabbit score: mild eye irritation
- (d) respiratory or skin sensitization: based on available data, the classification criteria are not met.
- (e) germ cell mutagenicity: based on available data, the classification criteria are not met.
- (f) carcinogenicity: based on available data, the classification criteria are not met.
- (g) reproductive toxicity: based on available data, the classification criteria are not met.
- (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 exposure based 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:

Sodium Hypochlorite:

Inhalation : This substance is irritating and corrosive by inhalation. Atmospheric concentrations in excess of the occupational exposure limit for chlorine may lead to immediate and severe irritation of the upper respiratory airways, intense coughing, choking and bronchospasm.

Skin contact: Contact with liquid sodium hypochlorite may cause burns. Repeated skin contact may cause dermatitis.

Eye contact: Direct eye contact can cause redness, blurred vision and pain. Repeated and prolonged exposure can cause permanent damage to eyes.

Ingestion: Ingestion will cause corrosion of and damage to the gastrointestinal tract.

Toxicological information: Cytogenic analysis reported human lymphocyte mutation data at an exposure level of 100ppm sodium hypochlorite over a 24-hour period.

Routes of exposure: the substance can be absorbed into the body by inhalation of its aerosol e per ingestione.

INHALATION RISK: can not be given any indication about the speed with which it reaches a harmful contamination in the air due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes, skin and respiratory tract effects of REPEATED EXPOSURE or long-term repeated or prolonged contact may cause skin sensitization.

Acute hazards/symptoms INHALATION cough. Sore throat.

SKIN Redness. Pain.

EYE Redness. Pain.

SWALLOWED, abdominal pain. Burning sensation. Cough. Diarrhea. Sore throat. Vomiting.

Specification: LC50 Inhalation route of Administration: test Species: Rat (female): Value > 10.5 mg/l For. test: 1:00

Specification: LD50 Via oral administration: test Species: Rat (male): Value > 1100 mg/kg specification: LD50 Dermal intake: test Species: rabbit value:> 20000 mg/kg

LD50 (rat) Oral (mg/kg body weight) = 1100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 10,5

sodium chlorate:

Routes of exposure: the substance can be absorbed into the body by inhalation of its aerosol e per ingestione.

INHALATION RISK: evaporation at 20 C is negligible; a harmful concentration of particles in air pu however be reached quickly when dispersed or spray, especially if powdered.

Effects of short-term exposure: the substance is irritating to the eyes, skin and respiratory tract. The substance effect on blood pu, causing the formation of methemoglobin and kidneys, causing kidney failure. The effects may be delayed. It is suitable for medical observation. See Notes.

Acute hazards/symptoms INHALATION cough. Sore throat. Blue lips or fingernails. Cute blue. Confusional State.

Convulsions. Dizziness. Headache. Nausea. A State of unconsciousness.
SKIN Redness.
EYE Redness. Pain.
SWALLOWED, abdominal pain. Diarrhea. Shortness of breath. Vomiting. (Further see inhalation).

Oral LD50-rat-1,200 mg/kg Lc50 Inhalation-rat-1h > 28,000 mg/m³ Ld50 Dermal-rabbit-> 10,000 mg/kg N or T and depending on the degree of exposure, periodic medical examinations are suggested.

LD50 (rat) Oral (mg/kg body weight) = 1200

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 28000

sodium hydroxide:

Routes of exposure: the substance can be absorbed into the body by inhalation of its aerosol e per ingestione.

INHALATION RISK: evaporation at 20 C is negligible; a harmful concentration of particles however pu aereodisperse be reached quickly.

Effects Of Short-term Exposure: Corrosive. The substance is verycorrosiva to the eyes, skin and respiratory tract.

Corrosive if swallowed. Aerosol inhalation of the substance can cause pulmonary edema (see notes).

Effects of long-term or repeated: repeated or prolonged Contact with skin may cause dermatitis.

Acute hazards/symptoms INHALATION AS corrosive. Burning sensation. Sore throat. Cough. Respiratory difficulties.

Shortness of breath. Symptoms may be delayed (see notes).

SKIN Corrosive. Redness. Pain. Severe skin burns. Blisters.

Corrosive EYES. Redness. Pain. Blurred vision. Severe deep burns.

SWALLOWING Corrosive. Burning sensation. Abdominal pain. Shock or collapse.

N O T E exposure limit value must not be exceeded in any moment of occupational exposure. Symptoms of lung oedema often do not occur before a few hours and are aggravated by physical effort. Are therefore essential rest and medical observation.

Acute oral toxicity LD50:140-340 mg/kg (Rat) Acute dermal toxicity LD50:1.350 mg/kg (rabbit)

LD50 (rat) Oral (mg/kg body weight) = 140

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1350

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Sodium Hypochlorite:

Environmental fate: Sodium hypochlorite is miscible with water and runoff from fire-control water or dilution water can cause pollution.

Toxicity and biodegradability: This substance is toxic to aquatic organisms and fish. The product decomposes quickly in soil and water and has low potential for bio-accumulation.

Persistence and degradation: The product degrades easily and will not persist in the environment. However, residual sodium does not degrade and will persist in the environment.

Effect on effluent treatment: A biological treatment process substantially removes the product. There is evidence of inhibition to the aerobic treatment process at a concentration of 0.05 mg/l Cl₂. Inform the management authorities on sewage works if this product enters the sewer.

Toxic to aquatic organisms.

The substance turned out to be highly toxic if applied directly on the leaves of eight species of flowering plants foliage; resulted in necrosis, chlorosis leaf excision and after a single application

Specification: LC50: Myriophyllum spicatum Alga Parametro Value 0.1-0.4 mg/l For. test: 96 h

Specification: Parametro: EC50 Daphnia Daphnia magna = Value 0.01-0.1 mg/l. test: 48 h

Specification: LC50: fish Parametro value = 0.01-0.1 mg/l. test: 96 h

Bacterial toxicity

Specification: EC 50 ca Value. 0.03 mg/l For. test: 7 Days

C(E)L50 (mg/l) = 0,01 100

100

sodium chlorate:

Toxicity Lc50 fish-Oncorhynchus mykiss (rainbow trout) > 1.000 mg/l-h 96.0

for Toxicity to daphnia and other aquatic invertebrates-Ec50 Daphnia magna (water flea)-> 1,000 mg/l 48-h

Toxicity to algae growth Inhibitor NOEC-Desmodesmus subspicatus (green)-3,137 mg/l 72-h growth Inhibitor

Desmodesmus subspicatus-LOEC (green) > 3,137 mg/l-72 h

C(E)L50 (mg/l) = 1

sodium hydroxide:

This substance can be dangerous for the environment; Special attention must be paid to aquatic organisms.

Use according to good working practices, avoiding release of the product in the environment.

Leuciscus idus melanotus Fish lc100 213mg/L, 48 h, Juhnke et al. (1978), Wasser Abwasser Forsch Z, 11, 161-164

LC50 fish Leuciscus idus melanotus 189mg/L, 48 h, Juhnke et al. (1978), Wasser Abwasser Forsch Z, 11, 161-164

Toxicity Lc50 fish-Gambusia affinis (Buzzacchiotto)-125 mg/l 96-h Lc50-Oncorhynchus mykiss (rainbow trout)-45.4 mg/l

96-h Toxicity to daphnia and other aquatic invertebrates – Daphnia Ec50 Immobilization-40.38 mg/l-48 h

C(E)L50 (mg/l) = 40,380001

The product is dangerous for the environment as it is very toxic to aquatic organisms following acute exposure.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:

Sodium Hypochlorite:

Decompose the light.

Stability increases with decreasing concentration, light, heating and metal contamination.

Decomposed by the action of carbon dioxide of the air.

The anhydrous form.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

12.6. Other adverse effects

No adverse effects

SECTION 13. 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. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information

14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 1791

If subject to the following characteristics is ADR exempt:

Combination packagings: per inner packaging 5 L per package 30 Kg

Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 Kg



14.2. UN proper shipping name

ADR/RID/IMDG: IPOCLORITO IN SOLUZIONE

ADR/RID/IMDG: HYPOCHLORITE SOLUTION

ICAO-IATA: HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 8

ADR/RID/IMDG/ICAO-IATA: Label : 8+Ambiente

ADR: Tunnel restriction code : E

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L

IMDG - EmS : F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous

IMDG: Marine polluting agent : Yes

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

SECTION 15. Regulatory information

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

Seveso category:

E1 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:

HP8 - Corrosive

HP14 - Ecotoxic

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

H271 = May cause fire or explosion; strong oxidiser.

H302 = Harmful if swallowed.

H411 = Toxic to aquatic life with long lasting effects.

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

** The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.
