



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

1 of 17

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

### 1.1. Product identifier

Code: F\_324  
Product name: CANDEGGINA Marsiglia  
UFI: 1PN3-209U-Q00Q-GR09

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

Identified Uses	Industrial	Professional	Consumer
Whitener and bleach	-	✓	✓

Uses Advised Against

Do not use for uses other than those indicated

### 1.3. Details of the supplier of the safety data sheet

Name: NEW FADOR S.r.l.  
Full address: via Mario Calderara, 31  
District and Country: 25018 Montichiari (BS)  
Italia

Tel. +39 030961 243

[www.newfador.it](http://www.newfador.it)

e-mail address of the competent person  
responsible for the Safety Data Sheet

[info@newfador.it](mailto:info@newfador.it)

### 1.4. Emergency telephone number

For urgent inquiries refer to emergency number: 112

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal word: Danger

Hazard statements:

**H290** May be corrosive to metals.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

2 of 17

<b>H314</b>	Causes severe skin burns and eye damage.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH206</b>	Warning! Do not use together with other products. May release dangerous gases (chlorine).
Precautionary statements:	
<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P301+P330+P331</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
<b>P303+P361+P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P310</b>	Immediately call a POISON CENTER/doctor
<b>P501</b>	Dispose of contents / container in accordance with current regulations.

**Contains:** sodium hypochlorite, solution 2,2 % Cl active

## Ingredients (Regulation 648/2004)

Less than 5% Chlorine-based bleaching agents

Perfumes

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.  
The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>sodium hypochlorite, solution</b> <b>15% Cl active</b>		
INDEX 017-011-00-1	$14,6 \leq x < 15$	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1, EUH031, Classification note according to Annex VI to the CLP Regulation: B EUH031: $\geq$ 5%
EC 231-668-3		
CAS 7681-52-9		
REACH Reg. 01-2119488154-34		
<b>DIPHENYL ETHER</b>		
INDEX -	$0 < x < 0,05$	Eye Irrit. 2 H319, Aquatic Acute 1 H400 M=1,



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

3 of 17

Aquatic Chronic 3 H412

EC 202-981-2

CAS 101-84-8

REACH Reg. 01-2119472545-33

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document. In case of more serious symptoms, call 118 to obtain immediate health rescue. Eyes: Remove, if present, the contact lenses if the situation allows you to perform the operation easily. Wash immediately and abundantly with water for at least 15 minutes, opening the eyelids well. Consult a doctor immediately.

Leather: remove contaminated clothing. Wash immediately and abundantly with running water (and soap if possible). Consult a doctor. Avoid further contacts with contaminated clothing.

Ingestion: do not induce vomiting if not expressly authorized by the doctor. Do not administer anything by oral way if the subject is unconscious. Consult a doctor immediately.

Inhalation: bring the subject to the open air, far from the place of the accident. Consult a doctor immediately.

#### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

In case of contact with the skin: Immediately remove contaminated clothing and eliminate them safely. Wash immediately with water. Consult a doctor immediately. In case of persistent skin irritation, consult a doctor.

In case of contact with the eyes: In case of contact with the eyes, rinse them with water for an adequate time interval and keeping the eyelids open, then immediately consult an ophthalmologist. Protect the angry eye. Consult a doctor immediately.

In case of ingestion: Consult a doctor immediately.

In case of inhalation: bring the injured person to the open air and keep it in the heat and rest.

#### Rescuer protection

It is good practice for the rescuer who provides help to a person who has been exposed to a chemical substance or mixture to wear personal protective equipment. The nature of these protections depends on the hazard of the substance or mixture, the mode of exposure and the extent of contamination. In the absence of other more specific indications, it is recommended to use disposable gloves in case of possible contact with biological liquids. For the type of PPE suitable for the characteristics of the substance or mixture, refer to section 8.

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

In case of inhalation: Irritation of the respiratory tract, cough. Inhalation of larger quantities may cause laryngospasm with shortness of breath.

In case of skin contact: reversible skin lesions (redness, swelling, burning)

In case of contact with eyes: serious damage to eyes

In case of ingestion: Ingestion may cause irritation of the mouth, throat, digestive system, diarrhea and vomiting. Vomiting can enter the lungs causing damage (aspiration)

#### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Damage to the eyes, skin irritation, erythema

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

In case of symptoms, whether acute or delayed, consult a doctor.

In the event of an accident or feeling unwell, consult a doctor immediately (show the instructions for use or safety data sheet if possible).

Treatment: Symptomatic treatment.

#### Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye washing.

#### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

In the event of an accident or malaise, consult a doctor immediately (if possible to show the instructions for use or the safety card).



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

4 of 17

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

Suitable extinction means. The extinction vehicles are the traditional ones: carbon dioxide, foam, dust and nebulized water.  
Non -suitable extinction means None in particular.

### 5.2. Special hazards arising from the substance or mixture

Dangers due to exposure in case of fire  
Avoid breathing combustion products.  
Combustion can produce gas and vapors potentially harmful to health such as carbon dioxide, carbon monoxide, satisfying, nox and irritating fumes.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Cool containers with water jets to prevent product decomposition and the development of substances potentially hazardous to health. Always wear full fire-fighting protective equipment. Collect extinguishing water, which must not be discharged into sewers. Dispose of contaminated fire-fighting water and fire residues in accordance with applicable regulations.

#### EQUIPMENT

Standard fire-fighting clothing, such as open-circuit compressed air breathing apparatus (EN 137), flame-retardant overalls (EN 469), flame-retardant gloves (EN 659), and firefighter boots (HO A29 or A30).

## SECTION 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For those who do not intervene directly

Stop the leak if there is no danger. Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for those employed in the processes and for emergency interventions. Remove unnecessary personnel.

#### 6.1.2. For those who intervene directly

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for those employed in the processes and for emergency interventions.

### 6.2. Environmental precautions

Prevent penetration into the soil/subsoil. Prevent runoff into surface water or sewer system. Retain contaminated wash water and discard it.

### 6.3. Methods and material for containment and cleaning up

Suck up the spilled product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material. Provide sufficient ventilation of the area affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of point 13.

### 6.4. Reference to other sections

Any information regarding personal protection and disposal is reported in sections 8 and 13

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Manipulate the product after consulting all the other sections of this safety card. Avoid the dispersion of the product in the environment. Do not eat, nor drink, nor smoking during use.

### 7.2. Conditions for safe storage, including any incompatibilities



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

5 of 17

Keep the product in clearly labeled containers. Store the containers away from any incompatible materials, checking section 10.

### 7.3. Specific end use(s)

Refer to the final uses identified in the subsection 1.2 of this form.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

DEU	Deutschland	WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe
DNK	Danmark	BEK nr 291 af 19/03/2024 (Historisk) Bekendtgørelse om grænseværdier for stoffer og materialer (kemiske agenser) i arbejdsmiljøet
ESP	España	Límites de exposición profesional para agentes químicos en España 2024
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. 10. april 2024 kl. 13.55
NLD	Nederland	Regeling van de Minister van Sociale Zaken en Werkgelegenheid van 13 mei2024, nr. 2024-0000092805, tot wijziging van deArbeidsomstandighedenregeling in verband met de implementatie vanRichtlijn 2022/431
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	HOTĂRÂRE nr. 179 din 28 februarie 2024 pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți ca
SWE	Sverige	Arbetsmiljöverkets föreskrifter och allmänna råd (AFS 2023:14) om gränsvärden för luftvägsexponering i arbetsmiljön
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	ACGIH	ACGIH 2025

### sodium hypochlorite, solution 15 % Cl active

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00021	mg/l
Normal value in marine water	0,000042	mg/l
Normal value for water, intermittent release	0,00026	mg/l
Normal value of STP microorganisms	4,69	mg/l
Normal value for the food chain (secondary poisoning)	11,1	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,26 mg/kg bw/d				
Inhalation	3,1 mg/m3	3,1 mg/m3	1,55 mg/m3	1,55 mg/m3	3,1 mg/m3	3,1 mg/m3	1,55 mg/m3	1,55 mg/m3



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

6 of 17

Skin

5000 ppm

5000 ppm

## DIPHENYL ETHER

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	7,1	1	7,1	1	
MAK	DEU	7,1	1	7,1	1	
TLV	DNK	7	1	14	2	
VLA	ESP	7	1	14	2	
VLEP	FRA	7	1	14	2	
HTP	FIN	7	1	14	2	
AK	HUN	7		14		
VLEP	ITA	7	1	14	2	
TLV	NOR	7	1	14	2	
TGG	NLD	7	1	14	2	
NDS/NDSCh	POL	7	1	14	2	
TLV	ROU	7	1	14	2	
NGV/KGV	SWE	7	1	14	2	
WEL	GBR	7	1	14	2	
OEL	EU	7	1	14	2	
ACGIH		7	1			

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0017	mg/l
Normal value in marine water	0,00017	mg/l
Normal value for fresh water sediment	0,345	mg/kg
Normal value for marine water sediment	0,0345	mg/kg
Normal value for water, intermittent release	0,005	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0681	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					14 mg/m3		9,68 mg/m3	59 mg/m3
Skin								58,3 mg/kg bw/d

#### Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

## 8.2. Exposure controls

Generic hygiene practice at work involves certain measures (for example, shower and change of clothes at the end of the work shift) in order to avoid Any type of third party contamination and appropriate cleaning practices (i.e. regular cleaning with adequate cleaning devices), do not eat and smoke in the workplace. In general, inhalation and ingestion must be avoided. Unless different indications, shoes and work clothing must be worn certificates.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

7 of 17

Contaminated work clothing must not be brought out of the workplace. Ensure good general ventilation in the place of and effective local aspiration or other technical equipment in order to maintain levels in the air below the exposure limit values. In the absence of adequate ventilation, automatic indicators and warnings to report the achievement of the concentrations or dangerous conditions. If this is not possible, frequent checks and measurements must be performed.

For the choice of personal protective equipment, ask for advice from their DPI suppliers. Individual protection devices must report the EC marking certifying their compliance with current regulations. Provide an emergency shower with face and eye wash station.

## Hands protection

Protect your hands with category III work gloves (Report EN 374). Recommended materials: nitrilic rubber, pvc, butyl rubber, neoprene. Protection class: 6 (permeation time greater than 480 minutes according to the EN 374 standard). Speaking of the recommended material:  $\geq 0.4$  mm During the identification phase of the relevant material and the relative thickness to be used, it is highly recommended to compare directly with the DPI producer to evaluate the actual protection on the basis of use and the duration of use.

For the definitive choice of the material of work gloves, compatibility, degradation, breakage and permeation must be considered.

In the case of preparing, the resistance of work gloves to chemical agents must be verified before use as they are not predictable. Gloves They have a wear time that depends on the duration and the use mode.

## SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

## EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

## RESPIRATORY PROTECTION

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

## ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	Remark: Visual
Odour	characteristic	Method: olfactory
Melting point / freezing point	0 °C	Method: literature data Substance: WATER
Initial boiling point	100 °C	Method: literature data
Flammability	not available	Reason for missing data: The substance/mixture is not flammable
Lower explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Upper explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Flash point	not available	Reason for missing data: The substance/mixture is not flammable
Auto-ignition temperature	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Decomposition temperature	not available	Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

8 of 17

Self-accelerating decomposition temperature (SADT)	not available	mixtures that they can decompose Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose
pH	>11,5	Method: pHmeter
Kinematic viscosity	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Solubility	soluble in water	Method: internal Temperature: 20 °C
Dissolution rate	not available	Reason for missing data: The mixture does not contain nanoform
Partition coefficient: n-octanol/water	not available	Reason for missing data: does not apply to inorganic and ionic liquids and, as a rule, it does not apply to blends
Dispersion stability	not available	Reason for missing data: The mixture does not contain nanoform
Vapour pressure	not available	Reason for missing data: not determined
Density and/or relative density	1,029 mg/l	
Relative vapour density	0,0006	Remark: kg/dm <sup>3</sup> Substance: WATER

## Particle characteristics

### Median equivalent diameter

Remark: It only applies to solids

### Size distribution

Remark: It only applies to solids

### Dustiness

Remark: It only applies to solids

### Specific surface area

Remark: It only applies to solids

### Shape

Remark: It only applies to solids

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

Information not available

### 9.2.2. Other safety characteristics

Acid/alkaline reserve	not available	Remark: Tests on the buffer capacity of the substance/mixture was not performed.
Miscibility	not available	Remark: See section 9.1 Solubility
Corrosiveness	not available	Remark: Classification pursuant to Reg. (EC) 1272/2008 as a corrosive based on extreme pH.
Explosive properties	not available	Reason for missing data: Absent chemical groups associated with explosive properties in accordance with the provisions of Annex I, Part 2, chap. 2.1.4.3 of Reg. (EC) 1272/2008 – CLP
Oxidising properties	not available	Reason for missing data: Absent requirements related to the presence of atoms or chemical bonds associated with oxidizing properties in the molecules of the components according to Annex I, Part 2, 2.13.4 Reg. (CE) 1272/2008

## SECTION 10. Stability and reactivity



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

9 of 17

## 10.1. Reactivity

There are no particular reaction dangers with other substances in normal conditions of use.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

In contact with very toxic gaseous acids. (Chlorine). Chlorine is an oxidizing agent. Corrosive for metals.

## 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Stable in normal conditions. The stability of the solution decreases with the action of heat and light and with contact with acids and some metals.

## 10.3. Possibility of hazardous reactions

In normal use and storage conditions, no dangerous reactions are predictable.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

In contact with very toxic gaseous acids. (Chlorine). Chlorine is an oxidizing agent. It reacts with ammonia in solution and amines forming compounds that can be explosive. It can react violently in contact with methanol, reaction accelerated by light and heat, and also in contact with many metals, in particular: copper, nickel, iron.

## 10.4. Conditions to avoid

None in particular. However, to follow the usual caution towards chemicals.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Keep shelter from heat and direct sunlight.

## 10.5. Incompatible materials

Strong acids, oxidizing agents. Don't mix with other chemicals.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Incompatible products: acids, ammonia, combustible materials. Products to avoid: iron, stainless steel, copper and copper alloys, aluminum, unprotected metals

Recommended materials: vulcanized steel or coated with rubber, polyethylene, reinforced polyester

## 10.6. Hazardous decomposition products

For thermal decomposition or in the event of a fire you can free gases and vapors potentially harmful to health as carbon dioxide, carbon monoxide, suffocating, noxious and irritating fumes.

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

In contact with very toxic gaseous acids. (Chlorine). Chlorine is an oxidizing agent.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

10 of 17

## Metabolism, toxicokinetics, mechanism of action and other information

The mixture as such has not been subjected to specific tests, therefore no experimental evaluations are available; please refer to the information in this subsection.

### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Animal data suggest that, after oral exposure, HOCl is absorbed and excreted primarily via urine as chloride (36.43% + 5.67% of the administered dose after 96 hours); a smaller amount of HO<sub>36</sub>Cl-derived radioactivity, not necessarily associated with absorption, was detectable in feces 96 hours after exposure (14.8% + 3.7%). Once in the body, it reacts directly with organic molecules to form some organochlorine compounds, characterized by their own toxicity. No data are available for other routes of exposure, including dermal and inhalation. Human data are very scarce and indirect. Absorption is suggested by some transient and non-serious systemic symptoms following ingestion, although the possibility that they are secondary to a local effect cannot be ruled out with certainty.

ECHA CHEM 10/25

## Information on likely routes of exposure

The likely routes of exposure depend on the use of the mixture.

Usually dermal exposure is the most likely, rarely inhalation and oral.

For the effects, please refer to the other subsections in this section and to section 4 of this sheet.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

The mixture as such has not been subjected to specific tests, therefore no experimental evaluations are available; please refer to the other subsections in this section and to section 4 of this sheet.

### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Key study (oral): No mortality occurred during a 90-day study in rats. Body weight gain was statistically significantly reduced in males at the 100 and 200 mg/kg body weight/day dosage groups and in females at the 228.8 mg/kg body weight/day dosage group (Hasegawa et al., 1986); no obvious macroscopic or histological changes were observed in any group. A NOAEL of 50 mg/kg body weight/day was identified.

ECHA CHEM 10/25

## Interactive effects

Under normal conditions of use no interactive effects are currently expected.

## ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

### sodium hypochlorite, solution 15 % Cl active

LD50 (Dermal):	> 20000 mg/kg rabbit
LD50 (Oral):	1100 mg/kg rat
LC50 (Inhalation vapours):	> 10,5 mg/l/1h rat

### DIPHENYL ETHER

LD50 (Dermal):	7940 mg/kg rabbit
LD50 (Oral):	2830 mg/kg rat

## SKIN CORROSION / IRRITATION

Corrosive for the skin.

Classification according to the experimental pH value

### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Key Study: A study was conducted to evaluate the skin irritant potential of sodium hypochlorite (Nixon, 1975). The results indicate that sodium hypochlorite, 5.25%, was mildly irritating in rabbits and guinea pigs under the conditions described in the study. The mean intact skin score (sum of mean erythema and edema scores at 4, 24, and 48 hours) was 1.0. All symptoms were reversible. The average score for intact human skin was 3.9 at the same concentration. However, according to the CLP Regulation, sodium hypochlorite must be classified with category 1B for skin corrosion.

ECHA CHEM 10/25

### DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## SERIOUS EYE DAMAGE / IRRITATION



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

11 of 17

Causes serious eye damage

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

Waiver of the study: According to column 2 of Annex VII of REACH, it is not necessary to conduct an eye irritation study (required in section 8.2) as the available information indicates that the criteria for classification as skin corrosive are met. Therefore, sodium hypochlorite must be classified as eye damage category 1 according to the CLP Regulation. No further tests are necessary. Studies conducted in the past are referred to as supporting studies. ECHA CHEM 10/25

DIPHENYL ETHER

Based on the weight of evidence of available data, the substance is classified as an eye irritant.

## RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## STOT - REPEATED EXPOSURE



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

12 of 17

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

It does not meet the classification criteria for this hazard class.

DIPHENYL ETHER

It does not meet the classification criteria for this hazard class.

## 11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on the aquatic environment.

### 12.1. Toxicity

sodium hypochlorite, solution 15 % Cl active

LC50 - for Fish	0,032 mg/l/96h
EC50 - for Crustacea	0,026 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,037 mg/l/72h
Chronic NOEC for Fish	0,04 mg/l
Chronic NOEC for Crustacea	0,007 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,0021 mg/l

DIPHENYL ETHER

LC50 - for Fish	4,2 mg/l/96h Danio Rerio
EC50 - for Crustacea	1,7 mg/l/48h Daphnia Magna
EC50 - for Algae / Aquatic Plants	0,455 mg/l/72h
Chronic NOEC for Fish	0,175 mg/l QSAR
Chronic NOEC for Crustacea	0,162 mg/l QSAR
Chronic NOEC for Algae / Aquatic Plants	0,24 mg/l/72h

### 12.2. Persistence and degradability

sodium hypochlorite, solution 15 % Cl active

Solubility in water	1000000 mg/l
---------------------	--------------



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

13 of 17

Degradability: information not available

## DIPHENYL ETHER

Solubility in water 18 mg/l 25°C  
Rapidly degradable 76%; 20d; OECD 301D

### 12.3. Bioaccumulative potential

sodium hypochlorite, solution 15 % Cl active

Partition coefficient: n-octanol/water -3,42

## DIPHENYL ETHER

BCF 594

### 12.4. Mobility in soil

sodium hypochlorite, solution 15 % Cl active

Partition coefficient: soil/water -2,97

## DIPHENYL ETHER

Partition coefficient: soil/water 3,3

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

### 12.7. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Before disposal, it is always recommended to classify waste according to applicable national legislation.

Indicatively, the codes of the European waste list can be:

20 01 29\* - detergents containing dangerous substances

15 01 10\* - packaging containing residues of dangerous substances or contaminated by such substances

#### SODIUM HYPOCHLORITE, SOLUTION 15 % CL ACTIVE

This material and its container must be disposed of as hazardous waste. Dispose of the product/container in accordance with local/regional/national/international regulation. Do not throw the residues in the sewers. Do not disperse in the environment. Handle the packaging contaminated in the same way as the substance itself. Fully empty packaging can be recycled.

The release of waste in the sewer is strongly not recommended. The disposal of this product, solutions and any by-product must be carried out by



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

14 of 17

always certifying the indications of the law on the protection of the environment and on the disposal of waste and the requirements of each relevant local authority.

Do not get rid of the product and the container except with the necessary precautions. Empty containers can contain product residues. Avoid the dispersion and outflow of material possibly spilled and the contact with soil, waterways, exhausts and sewers.

## SECTION 14. Transport information

### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: UN 1791

### 14.2. UN proper shipping name

ADR / RID: HYPOCHLORITE SOLUTION

IMDG: HYPOCHLORITE SOLUTION

IATA: HYPOCHLORITE SOLUTION

### 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8

IATA: Class: 8 Label: 8



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

### 14.5. Environmental hazards

ADR / RID: NO

IMDG: not marine pollutant

IATA: NO

### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80

Special provision: 521

IMDG: EMS: F-A, S-B

IATA: Cargo:

Limited  
Quantities: 5  
L

Limited  
Quantities: 5  
L  
Maximum  
quantity: 60 L

Tunnel  
restriction  
code: (E)

Packaging  
instructions:  
856



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

15 of 17

Passengers:

Maximum quantity: 5 L

Packaging instructions: 852

Special provision:

A3, A803

## 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

#### Product

Point 3 - 40

#### Contained substance

Point	75	2-methylpentane-2,4-diol REACH Reg.: 01-2119539582-35
Point	75	sodium hypochlorite, solution 15 % Cl active REACH Reg.: 01-2119488154-34

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors  
not applicable

#### Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

#### Substances subject to authorisation (Annex XIV REACH)

None

#### Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

#### Substances subject to the Rotterdam Convention:

None

#### Substances subject to the Stockholm Convention:

None

#### Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

16 of 17

## 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Met. Corr. 1</b>	Substance or mixture corrosive to metals, category 1
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Skin Corr. 1</b>	Skin corrosion, category 1
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H290</b>	May be corrosive to metals.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH031</b>	Contact with acids liberates toxic gas.
<b>EUH206</b>	Warning! Do not use together with other products. May release dangerous gases (chlorine).

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 14/04/2020

Revision n° 3

Rev. Date 15/04/2026

Page

17 of 17

- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
  19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
  20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
  22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
  23. Delegated Regulation (UE) 2023/707
  24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
  25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
  26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
  27. Delegated Regulation (UE) 2024/2564 (XXII Atp. CLP)
  28. Regulation (EU) 2024/2865
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
- ECHA CHEM website (ECHA Chemicals Database)

### Note for the user:

The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. We do not assume responsibility for improper use.

Provide adequate training to personnel responsible for using chemical products.

### CLASSIFICATION CALCULATION METHODS

Chemical-physical hazards: The classification of the product was derived from the criteria established by the CLP Regulation Annex I Part 2. The methods of evaluation of the chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on the calculation methods in Annex I of CLP Part 3, unless otherwise indicated in section 11.

Environmental hazards: The classification of the product is based on the calculation methods in Annex I of CLP Part 4, unless otherwise indicated in section 12.

### Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.