



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

1 of 21

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

### 1.1. Product identifier

Code: F\_203  
Product name: LAVATRICE Nero e Capi Scuri  
UFI: Y9A3-T0ST-N00U-EEGG

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

Identified Uses	Industrial	Professional	Consumer
Laundry detergent	-	✓	✓

### 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

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

info@newfador.it

### 1.4. Emergency telephone number

For urgent inquiries refer to: NEW FADOR S.r.l.  
  
+39 030961 243  
  
(08.30 - 17.30)

## 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.

Classified based on DetNet Logging Documents Number 1758

### Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.

### 2.2. Label elements

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

Hazard pictograms:



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

2 of 21



Signal word:  
Hazard statements:

Warning

**H319**  
**H315**  
**EUH208**

Causes serious eye irritation.  
Causes skin irritation.  
Contains: 1,2-benzisothiazol-3(2H)-one  
May produce an allergic reaction.

Precautionary  
statements:

**P101**  
**P102**  
**P264**  
**P280**  
**P305+P351+P338**  
**P337+P313**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Wash your hands thoroughly after use.  
Wear protective gloves/ protective clothing / eye protection / face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice / attention.

## Ingredients (Regulation 648/2004)

Less than 5% Phosphonates, Non-ionic surfactants, Soap  
5% or over but less than 15% Anionic surfactants

Enzymes, Perfumes, Tetramethyl acetyloctahydronaphthalenes

Preservation agents: Glutaral, Benzisothiazolinone, 2-Bromo-2-Nitropropane-1,3-Diol

## 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>BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS</b>		
INDEX -	$5 \leq x < 6$	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412 LD50 Oral: 1080 mg/kg
EC 270-115-0		



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

3 of 21

CAS 68411-30-3

REACH Reg. 01-2119489428-22

**ALCOHOLS, C12-14,  
ETHOXYLATED, SULFATES,  
SODIUM SALTS**

INDEX -

$5 \leq x < 6$

Eye Dam. 1 H318,  
Skin Irrit. 2 H315,  
Aquatic Chronic 3 H412  
Eye Dam. 1 H318:  $\geq 10\%$ ,  
Eye Irrit. 2 H319:  $\geq 5\% - < 10\%$

EC 500-234-8

CAS 68891-38-3

REACH Reg. 01-2119488639-16

**ALCOHOLS, C12-13, BRANCHED  
AND LINEAR, ETHOXYLATED**

INDEX -

$1,5 \leq x < 2$

Acute Tox. 4 H302,  
Eye Dam. 1 H318,  
Aquatic Chronic 3 H412  
Eye Dam. 1 H318:  $\geq 10\%$ ,  
Eye Irrit. 2 H319:  $\geq 1\% - < 10\%$   
LD50 Oral:  $>300$  mg/kg

EC 931-954-4

CAS 160901-19-9

**bronopol (INN)**

INDEX 603-085-00-8

$0 < x < 0,05$

Acute Tox. 4 H302,  
Acute Tox. 4 H312,  
Eye Dam. 1 H318,  
Skin Irrit. 2 H315,  
STOT SE 3 H335,  
Aquatic Acute 1 H400 M=10,  
Aquatic Chronic 2 H411  
ATE Oral: 500 mg/kg, ATE Dermal: 1100 mg/kg

EC 200-143-0

CAS 52-51-7

REACH Reg. 01-2119980938-15

**1,2-benzisothiazol-3(2H)-one**

INDEX 613-088-00-6

$0 < x < 0,036$

Acute Tox. 2 H330,  
Acute Tox. 4 H302,  
Eye Dam. 1 H318,  
Skin Irrit. 2 H315,  
Skin Sens. 1A H317,  
Aquatic Acute 1 H400 M=1,  
Aquatic Chronic 1 H410 M=1  
Skin Sens. 1A H317:  $\geq 0,036\%$

EC 220-120-9

CAS 2634-33-5

LD50 Oral: 450 mg/kg, ATE Inhalation mists/powders: 0,051 mg/l

**MORPHOLINE**

INDEX 613-028-00-9

$0 < x < 0,05$

Flam. Liq. 3 H226,  
Acute Tox. 4 H302,  
Acute Tox. 4 H312,  
Acute Tox. 4 H332,  
Skin Corr. 1B H314,  
Eye Dam. 1 H318  
LD50 Oral: 1050 mg/kg,  
ATE Dermal: 1100 mg/kg,  
LC50 Inhalation vapours: 35,1 mg/l/1h

EC 203-815-1

CAS 110-91-8

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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

4 of 21

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

If in doubt or if you experience symptoms, contact a doctor and show him this document.

In case of more serious symptoms, call 118 to obtain immediate medical help.

**EYES:** Remove contact lenses, if present, if the situation allows you to carry out the operation easily. Wash immediately and abundantly with water for at least 15 minutes, opening the eyelids wide. Consult a doctor immediately.

**SKIN:** Remove contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Consult a doctor. Avoid further contact with contaminated clothing.

**INGESTION:** Do not induce vomiting unless expressly authorized by your doctor. Do not give anything by mouth if the person is unconscious. Consult a doctor immediately.

**INHALATION:** Move the subject to fresh air, away from the accident site. Consult a doctor immediately.

### 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 contact with skin: Temporary skin irritation (redness, swelling, burning), sensitization may appear in susceptible individuals.

In case of contact with eyes: Mild to severe eye irritation (redness, swelling, burning, tearing)

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)

### 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

Means to be available in the workplace for specific and immediate treatment: Running water for skin and eye washing.

## 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.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

5 of 21

## 5.3. Advice for firefighters

### INFORMAZIONI GENERALI

Raffreddare con getti d'acqua i contenitori per evitare la decomposizione del prodotto e lo sviluppo di sostanze potenzialmente pericolose per la salute. Indossare sempre l'equipaggiamento completo di protezione antincendio. Raccogliere le acque di spegnimento che non devono essere scaricate nelle fognature. Smaltire l'acqua contaminata usata per l'estinzione ed il residuo dell'incendio secondo le norme vigenti.

### EQUIPAGGIAMENTO

Indumenti normali per la lotta al fuoco, come un autorespiratore ad aria compressa a circuito aperto (EN 137), completo antifiamma (EN469), guanti antifiamma (EN 659) e stivali per Vigili del Fuoco (HO A29 oppure 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

Block the loss if there is no danger.

Wear adequate protection devices (including the individual protective equipment referred to in section 8 of the security data sheet) in order to prevent contaminations of the skin, eyes and personal clothing. These indications are valid for both the employees processes that for emergency interventions.

Remove the unnecessary staff.

6.1.2. For those who intervene directly

Wear adequate protection devices (including the individual protective equipment referred to in section 8 of the security data sheet) in order to prevent contaminations of the skin, eyes and personal clothing. These indications are valid for both the employees processes that for emergency interventions.

### 6.2. Environmental precautions

Impedire che il prodotto penetri nelle fognature, nelle acque superficiali, nelle falde freatiche.

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

Aspire the product leakage in 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 for sufficient ventilation of the place affected by the loss. The disposal of the contaminated material must be carried out in accordance with the provisions of point 13.

### 6.4. Reference to other sections

Any information regarding individual protection and disposal is shown to 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

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.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

6 of 21

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.28 от 2 Април 2024г.)
CZE	Česká Republika	NAŘÍZENÍ VLÁDY ze dne 18. října 2023, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
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
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία``»
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 mei 2024, nr. 2024-0000092805, tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2022/431
PRT	Portugal	Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração
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
SVK	Slovensko	121_2024 Z. z. Nariadenie vlády o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym, mutagénnym alebo reprodukčne toxickým faktorom pri práci
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti rakotvornim, mutagenim ali reprotoksičnim snovem pri delu. Ljubljana, četrtek 4. 4. 2024
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

## BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,268	mg/l
Normal value in marine water	0,027	mg/l
Normal value for fresh water sediment	8,1	mg/kg
Normal value for marine water sediment	6,8	mg/kg
Normal value for water, intermittent release	0,017	mg/l
Normal value of STP microorganisms	3,43	mg/l
Normal value for the terrestrial compartment	35	mg/kg

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

Effects on consumers

Effects on workers



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

7 of 21

Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,425 mg/kg bw/d				
Inhalation			1,5	1,5 mg/m3			6	6 mg/m3
Skin				42,5 mg/kg bw/d				85 mg/kg bw/d

## ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	0,917	mg/kg
Normal value for marine water sediment	0,092	mg/kg
Normal value for water, intermittent release	0,071	mg/l
Normal value of STP microorganisms	10	g/l
Normal value for the terrestrial compartment	7,5	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				15 mg/kg bw/d				
Inhalation				52 mg/m3				175 mg/m3
Skin				1650 mg/kg bw/d				2750 mg/kg bw/d

## bronopol (INN)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,01	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,041	mg/kg/d
Normal value for marine water sediment	0,003	mg/kg/d
Normal value for water, intermittent release	0,003	mg/l
Normal value of STP microorganisms	0,43	mg/l
Normal value for the terrestrial compartment	0,5	mg/kg/d

## 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		1,1 mg/kg bw/d		0,35 mg/kg bw/d				
Inhalation	1,3 mg/m3	3,7 mg/m3	1,3 mg/m3	1,2 mg/m3	4,2 mg/m3	12,3 mg/m3	4,2 mg/m3	4,1 mg/m3
Skin	0,008 mg/cm2	4,2 mg/kg bw/d	0,008 mg/cm2	1,4 mg/kg bw/d	0,013 mg/cm2	7 mg/kg bw/d	0,013 mg/cm2	2,3 mg/kg bw/d

## MORPHOLINE

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	36	10	72	20	
TLV	CZE	35	9,66	70	19,32	



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

8 of 21

AGW	DEU	36	10	72	20	SKIN	
MAK	DEU	36	10	72	20		
TLV	DNK	36	10			SKIN	E
VLA	ESP	36	10	72	20		
VLEP	FRA	36	10	72	20		
HTP	FIN	36	10	72	20	SKIN	
TLV	GRC	36	10	72	20		
AK	HUN	36		72			
VLEP	ITA	36	10	72	20	SKIN	
TLV	NOR	36	10			SKIN	
TGG	NLD	36		72		SKIN	
VLE	PRT	36	10	72	20		
NDS/NDSch	POL	36		72		SKIN	
TLV	ROU	36	10	72	20		
NGV/KGV	SWE	35	10	72	20		
NPEL	SVK	36	10	72	20		
MV	SVN	36	10	72	20	SKIN	
WEL	GBR	36	10	72	20	SKIN	
OEL	EU	36	10	72	20		
ACGIH		71	20			SKIN	

## 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. 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

9 of 21

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

Normally no respiratory protective device is required. In case of insufficient ventilation, exceeding the limit values in the workplace, excessive olfactory disturbance or in the presence of dust, aerosols, mists and smoke, it is necessary to use a respiratory protection mask independent of ambient air or a respiratory protection mask with filter or combined filters which must be chosen according to the EN 141 standard.

## 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	Temperature: 20 °C
Colour	white	Temperature: 20 °C
Odour	characteristic	Method: internal
Melting point / freezing point	0 °C	Method: literature data
		Substance: WATER
Initial boiling point	100 °C	Method: literature data
		Substance: WATER
		Initial boiling point: 100 °C
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 mixtures that they can decompose
pH	8,5-9.5	Method: internal method
		Concentration: 100 %
		Temperature: 20 °C
Kinematic viscosity	900 ± 300 mm <sup>2</sup> /sec	Method: internal
		Temperature: 20 °C
Solubility	Complete in water	Method: internal
		Temperature: 20 °C
Partition coefficient: n-octanol/water	not available	Reason for missing data: does not apply to inorganic and ionic liquids and, as a rule, it



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

10 of 21

Vapour pressure	0,02 Atm	does not apply to blends Method: datum of literature Substance: WATER Vapour pressure: 17,5 mmHg Temperature: 20 °C
Density and/or relative density	1,029	Method: internal Temperature: 20 °C
Relative vapour density	0,0006 kg/dm <sup>3</sup>	Method: Literature data Substance: WATER Temperature: 0 °C

## 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
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

### 10.1. Reactivity

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

bronopol (INN)

Decomposes on contact with: water, metals, strong bases.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

11 of 21

## MORPHOLINE

On contact with: strong oxidising agents, reducing agents, strong acids, strong bases. May develop: heat.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

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

### 10.4. Conditions to avoid

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

bronopol (INN)

Avoid exposure to: light, UV rays, moisture.

### 10.5. Incompatible materials

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

### 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, satisfying, nox and irritating fumes.

bronopol (INN)

May develop: nitric oxide, carbon oxides, hydrobromic acid.

## SECTION 11. Toxicological information

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

#### 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.

#### ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Following exposure, the irritant properties of substances belonging to the AES (alkyl ether sulfates) category are considered the main health effect at the site of first contact. Following oral exposure, AES substances are readily absorbed in the gastrointestinal tract in humans and rats and excreted primarily via urine or feces, depending on the length of the ethoxy chain (EO), but regardless of the route of administration. Following skin exposure, skin absorption of AES substances is very low (< 1%). Available ex vivo and in vivo data demonstrate that the test substance AES remains on the skin surface. Once absorbed, AES substances are extensively metabolized by  $\beta$ - or  $\gamma$ -oxidation. The alkyl chain appears to be oxidized to CO<sub>2</sub>, which is exhaled. The EO chain appears to be resistant to metabolism. The ethoxy chain length, i.e. the number of ethoxyl (EO) groups, in an AES molecule appears to have an important impact on the toxicokinetics of AES substances in humans and rats. AES substances with ethoxy chains > 7-9 EO groups are excreted in higher proportions in the faeces. This, however, is not relevant for current members of the AES category, since their average degree of ethoxylation is <2.5.

(ECHA CHEM 10/25)

#### ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

No data available.

#### 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.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

12 of 21

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.

### ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Chronic toxicity

Oral (subchronic, rat, m/f, OECD 408): NOAEL (systemic toxicity)  $\geq$  225 mg/kg body weight/day

Oral (subchronic, rat, m/f, OECD 408): LOAEL (local toxicity) = 25 mg/kg body weight/day

(ECHA CHEM 10/25)

### ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Rat; Oral; 2 years

NOAEL: 50 mg/kg (based on body weight and day)

Target organs: Heart, Liver, Kidney

Symptoms: limited increase in body weight, Increase in relative organ weights

group observation

(value of literature)

## 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:

>2000 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

### BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

LD50 (Dermal):

> 2000 mg/kg rat

LD50 (Oral):

1080 mg/kg rat

### ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

LD50 (Dermal):

> 2000 mg/kg rat

LD50 (Oral):

> 2000 mg/kg rat

### ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

LD50 (Dermal):

> 2000 mg/kg rabbit

LD50 (Oral):

> 300 mg/kg rat

bronopol (INN)

LD50 (Dermal):

> 2000 mg/kg bw rat

LD50 (Oral):

254 mg/kg Male Rat

LC50 (Inhalation mists/powders):

> 0,588 mg/l air/4h rat

1,2-benzisothiazol-3(2H)-one

LD50 (Oral):

450 mg/kg

LC50 (Inhalation mists/powders):

0,21 mg/l

MORPHOLINE

LD50 (Dermal):

500 mg/kg Rabbit

LD50 (Oral):

1050 mg/kg Rat

LC50 (Inhalation vapours):

35,1 mg/l/1h Rat

## SKIN CORROSION / IRRITATION

Causes skin irritation

### ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Causes skin irritation

Irritating (literature data, Oecd 404, 1994)



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

13 of 21

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

On rabbits: No skin irritation

Own test values/bibliographic values

group observation

Based on available data, the classification criteria are not met.

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Causes serious eye injuries

Irritating (literature data, oecd 405, 1980)

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

On rabbit: Irreversible effects on the eyes

Own test values/bibliographic values

group observation

Causes serious eye damage.

group observation

Substance to be tested: Dilution, 10%

Causes serious eye irritation.

## RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

1,2-benzisothiazol-3(2H)-one

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Maximization Test Guinea pig: non-sensitizing

group observation

(value of literature)

Based on available data, the classification criteria are not met

## Skin sensitization

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Non -sensitizing (literature data, OECD 406, 1986)

## GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

Negative Ames test (literature data, Oecd 476, 1995)

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Genotoxicity in vitro

In vitro assays did not reveal mutagenic effects

group observation

Own test values/bibliographic values

Genotoxicity in vivo

In vivo tests did not reveal mutagenic effects

group observation

(value of literature)

Not classifiable based on available information.

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

14 of 21

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

Non -carcinogenic (evidence weight, literature data)

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

The substance has proven to be non-genotoxic, therefore carcinogenic potential should not be expected

group observation

(value of literature)

Not classifiable based on available information.

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

Not toxic for reproduction up to 1000 mg/kg body weight/day (literature data)

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Not classifiable based on available information.

## Adverse effects on sexual function and fertility

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Tests on animals revealed no effects on fertility

group observation

(value of literature)

## Adverse effects on development of the offspring

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

It did not show teratogenic effects in animal experiments

group observation

(value of literature)

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

The substance or mixture is not classified as target organ toxicant, single exposure.

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

The substance or mixture is not classified as a specific target organ toxicant, repeated exposure.

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Does not respond to the classification criteria for this danger class



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

15 of 21

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED  
Not classifiable based on available information.

## 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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

BENZENESULFONIC ACID, C10-13-ALKYL  
DERIVS., SODIUM SALTS

LC50 - for Fish	1,67 mg/l/96h
EC50 - for Crustacea	2,9 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,91 mg/l/72h
Chronic NOEC for Fish	0,23 mg/l 72d
Chronic NOEC for Crustacea	0,5 mg/l 7d
Chronic NOEC for Algae / Aquatic Plants	0,5 mg/l 96h

ALCOHOLS, C12-14, ETHOXYLATED,  
SULFATES, SODIUM SALTS

LC50 - for Fish	> 1 mg/l/96h Danio rerio
EC50 - for Crustacea	7,2 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	27 mg/l/72h Desmodesmus subspicatus
Chronic NOEC for Fish	0,14 mg/l 28d Oncorhynchus mykiss
Chronic NOEC for Crustacea	0,18 mg/l 21d Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,93 mg/l Desmodesmus subspicatus

ALCOHOLS, C12-13, BRANCHED AND  
LINEAR, ETHOXYLATED

EC50 - for Algae / Aquatic Plants	> 1 mg/l/72h Desmodesmus subspicatus
EC10 for Crustacea	> 0,1 mg/l Daphnia magna

bronopol (INN)

LC50 - for Fish	35,7 mg/l/96 d Lepomis macrochirus
EC50 - for Crustacea	0,27 mg/l/21 d Daphnia magna
EC50 - for Algae / Aquatic Plants	0,25 mg/l/72h Skeletonema costatum
Chronic NOEC for Fish	> 20 mg/l/96 h Lepomis macrochirus
Chronic NOEC for Crustacea	0,27 mg/l/21 d Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,08 mg/l/72 h Skeletonema costatum



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

16 of 21

## 12.2. Persistence and degradability

BENZENESULFONIC ACID, C10-13-ALKYL  
DERIVS., SODIUM SALTS  
Rapidly degradable

ALCOHOLS, C12-14, ETHOXYLATED,  
SULFATES, SODIUM SALTS  
Rapidly degradable

ALCOHOLS, C12-13, BRANCHED AND  
LINEAR, ETHOXYLATED  
Rapidly degradable

bronopol (INN)

Solubility in water 286000 mg/l

Rapidly degradable

MORPHOLINE

Solubility in water 1000 - 10000 mg/l

## 12.3. Bioaccumulative potential

BENZENESULFONIC ACID, C10-13-ALKYL  
DERIVS., SODIUM SALTS  
BCF 159

bronopol (INN)

Partition coefficient: n-octanol/water 0,22

BCF 3,16

MORPHOLINE

Partition coefficient: n-octanol/water -2,55

BCF < 0,65

## 12.4. Mobility in soil

ALCOHOLS, C12-14, ETHOXYLATED,  
SULFATES, SODIUM SALTS  
Partition coefficient: soil/water 0,34

ALCOHOLS, C12-13, BRANCHED AND  
LINEAR, ETHOXYLATED  
Partition coefficient: soil/water 3,69

bronopol (INN)

Partition coefficient: soil/water 1,56 Soil 4: clay loam

MORPHOLINE



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

17 of 21

Partition coefficient: soil/water

-0,6196

## 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

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 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

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

### 14.1. UN number or ID number

not applicable

### 14.2. UN proper shipping name

not applicable

### 14.3. Transport hazard class(es)

not applicable

### 14.4. Packing group

not applicable



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

18 of 21

## 14.5. Environmental hazards

not applicable

## 14.6. Special precautions for user

not applicable

## 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	SODIUM HYDROXIDE REACH Reg.: 01-2119457892-27
Point	75	Glutaraldehyde REACH Reg.: 01-2119455549-26
Point	75	1,2-benzisothiazol-3(2H)-one
Point	75	(R)-P-MENTHA-1,8-DIENE REACH Reg.: 01-2119529223-47
Point	75	MORPHOLINE
Point	75	bronopol (INN) REACH Reg.: 01-2119980938-15
Point	78	The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

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.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

19 of 21

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.

## 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>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 2</b>	Acute toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<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>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<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 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H330</b>	Fatal if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<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>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

20 of 21

## 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
- 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)



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/09/2023

Revision n° 2

Rev. Date 27/03/2026

Page

21 of 21

- 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.

Classified based on DetNet Logging Documents Number 1758

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 09 / 10 / 11 / 12 / 13 / 15 / 16.