



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 25/07/2019

Revision n° 3

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

### 1.1. Product identifier

Code: F\_248  
Product name: SGRASSATORE LIMONE PRIM.  
UFI: A5F3-K0UP-F003-6SQD

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

Identified Uses	Industrial	Professional	Consumer
Degreaser	-	✓	✓

### 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.

Hazard classification and indication:

Eye irritation, category 2

H319

Causes serious eye irritation.

### 2.2. Label elements

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

Hazard pictograms:



Signal words:

Warning

Hazard statements:

H319

Causes serious eye irritation.

Precautionary



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statements:

**P101**

If medical advice is needed, have product container or label at hand.

**P102**

Keep out of reach of children.

**P280**

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

**P305+P351+P338**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P337+P313**

If eye irritation persists: Get medical advice / attention.

## Ingredients (Regulation 648/2004)

Less than 5%

Non-ionic surfactants

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>ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED INDEX -</b>	$1 \leq x < 1,5$	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		
<b>ETHANOLAMINE</b>		
INDEX 603-030-00-8	$0,15 \leq x < 0,2$	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Chronic 3 H412 STOT SE 3 H335: $\geq 5\%$
EC 205-483-3		
CAS 141-43-5		LD50 Oral: $>1089$ mg/kg, ATE Dermal: $1100$ mg/kg, ATE Inhalation vapours: $11$ mg/l
REACH Reg. 01-2119486455-28		
<b>toluene</b>		
INDEX 601-021-00-3	$0 < x < 0,05$	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315,



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STOT SE 3 H336

EC 203-625-9

CAS 108-88-3

REACH Reg. 01-2119471310-51-

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.

#### Rescuer protection

Protection of rescuers:

It is a good practice for the rescuer who lends help to a subject, who has been exposed to a chemical or a mixture, to wear individual protective equipment. The nature of these protections depends on the danger of the substance or mixture, the method of exposure and the extent of the 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 greater quantities can cause laryngospasm with lack of breath.

In case of contact with the skin: temporary skin irritation (redness, swelling, burning)

In case of contact with the eyes: from modest to strong irritation of the eyes (redness, swelling, burning, tearing)

In case of ingestion: ingestion can cause mouth irritation, throat, digestive system, diarrhea and vomiting. Vomiting

It can enter the lungs causing damage (suction)

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

In case of symptoms, both acute and delayed, consult a doctor.

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

Treatment: symptomatic treatment.

#### Means to have 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.



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Non -suitable extinction means  
None in particular.

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

### HAZARDS DUE TO EXPOSURE IN THE EVENT OF A FIRE

Avoid breathing combustion products.

Combustion can produce potentially harmful gases and vapors, such as carbon dioxide, carbon monoxide, and irritating fumes..

## 5.3. Advice for firefighters

### General information

Cool the containers with water jets to avoid the decomposition of the product and the development of substances potentially dangerous for health. Always wear the equipment complete with fire protection. Collect the shutdown waters that must not be downloaded in the sewers. Dispose of the contaminated water used for the extinction and residue of the fire according to the current regulations.

### EQUIPMENT

Normal clothing for the fight against fire, such as an open circuit compressed air car rescue (EN 137), full anti -fiamema (EN469), anti -fiamma gloves (EN 659) and boots for firefighters (I have 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

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.

### ETHANOLAMINE

Avoid inhalation. Avoid contact with the skin, eyes and clothing.

### 6.2. Environmental precautions

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

### ETHANOLAMINE

Do not enter the sewers, surface waters and underground waters.

### 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.

### ETHANOLAMINE

Large quantities: mechanically suck the product.

Residues: collect with suitable absorbent materials. Do not collect with sawdust or with others fuel substances.

Thoroughly clean with water and surfactive objects and contaminated floors, in compliance with the legislation current on the subject. Collect the waste separately in suitable, labeled and sealed containers.

Disposal in compliance with current legislation on the subject by landfill or authorized system



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treatment and thermotulation.

## 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.

ETHANOLAMINE

Fire protection and anti -explosion:

The product is fuel. Predict measures against the formation of electrostatic charges - keep

Far from lecture sources - make an extinguishing available.

### 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.

ETHANOLAMINE

Stabilità allo stoccaggio: Temperatura di immagazzinaggio: < 40 °C

Possibile cambiamento di colore dopo un lungo magazzino.

### 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:

AUS	Österreich	Gesamte Rechtsvorschrift für Grenzwerteverordnung 2024, Fassung vom 12.12.2024
BEL	Belgique	Liste de valeurs limites d'exposition aux agents chimiques, livre VI du code du bien-être au travail
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.)
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail: VME/VLE (SUVA). Grenzwerte am Arbeitsplatz: MAK (SUVA)
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
EST	Eesti	Ohtlike kemikaalide ja neid sisaldavate materjalide kasutamise töötervishoiu ja tööohutuse nõuded ning töökeskkonna keemiliste ohutegurite piirnormid 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 HÄLSOVÄRDSDMINISTERIETS 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



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HUN	Magyarország
HRV	Hrvatska
ITA	Italia
IRL	Éire
LUX	Luxembourg
LTU	Lietuva
LVA	Latvija
NOR	Norge
NLD	Nederland
PRT	Portugal
POL	Polska
ROU	România
SWE	Sverige
SVK	Slovensko
SVN	Slovenija
GBR	United Kingdom
EU	OEL EU

την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία.»  
Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről  
PRAVILNIK O IZMJENAMA I DOPUNAMA PRAVILNIKA O ZAŠTITI RADNIKA OD IZLOŽENOSTI OPASNIM KEMIČALIJAMA NA RADU, GRANIČNIM VRIJEDNOSTIMA IZLOŽENOSTI I BIOLOŠKIM GRANIČNIM VRIJEDNOSTIMA  
Decreto Legislativo 9 Aprile 2008, n.81  
2024 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) & the Safety, Health and Welfare at Work (Carcinogens, Mutagens and Reprotoxic Substances) Regulations (2024)  
Règlement grand-ducal du 17 mars 2021 ayant pour objet de modifier le règlement grand-ducal modifié du 14 novembre 2016 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de trava  
Jsakymas dėl lietuvis higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo  
Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskaņā ar ķīmiskajām vielām darba vietās" Oficiālā izdevuma publikācijas Nr.: 2024/65.2  
Forskrift om endring i forskrift om tiltaksverdi 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  
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  
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  
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  
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  
Arbetsmiljöverkets föreskrifter och allmänna råd (AFS 2023:14) om gränsvärden för luftvägsexponering i arbetsmiljön  
121\_2024 Z. z. Nariadenie vlády o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym, mutagénnym alebo reprodukčne toxickým faktorom pri práci  
Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti rakotvornim, mutagenim ali reprotoksičnim snovem pri delu. Ljubljana, četrtek 4. 4. 2024  
EH40/2005 Workplace exposure limits (Fourth Edition 2020)  
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.

## ETHANOLAMINE

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	2,5	1	7,6	3	SKIN
VLEP	BEL	2,5	1	7,6	3	SKIN
TLV	BGR	8		15		
MAK	CHE	5	2	10	4	
VME/VLE	CHE	5	2	10	4	
TLV	CZE	2,5		7,5		SKIN
AGW	DEU	5,1	2	10,2	4	SKIN
MAK	DEU	5,1	2	10,2	4	
TLV	DNK	2,5	1			SKIN
VLA	ESP	2,5	1	7,5	3	SKIN
TLV	EST	2,5	1	7,6	3	SKIN
VLEP	FRA	2,5	1	7,6	3	SKIN
HTP	FIN	2,5	1	7,6	3	SKIN
TLV	GRC	2,5	1	7,6	3	



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GVI/KGVI	HRV	2,5	1	7,6	3	SKIN
VLEP	ITA	2,5	1	7,6	3	SKIN
OELV	IRL	2,5	1	7,6	3	SKIN
VL	LUX	2,5	1	7,6	3	SKIN
RD	LTU	8	3	15	6	SKIN
RV	LVA	0,5	0,2	7,6	3	SKIN
TLV	NOR	2,5	1			SKIN
TGG	NLD	2,5		7,6		SKIN
VLE	PRT	2,5	1	7,6	3	SKIN
NDS/NDSch	POL	2,5		7,5		
NGV/KGV	SWE	8	3	15	6	SKIN
MV	SVN	2,5	1			SKIN
WEL	GBR	2,5	1	7,6	3	SKIN
OEL	EU	2,5	1	7,6	3	SKIN

## Predicted no-effect concentration - PNEC

Normal value in fresh water	0,07	mg/l
Normal value in marine water	0,007	mg/l
Normal value for fresh water sediment	0,357	mg/kg
Normal value for marine water sediment	0,0357	mg/kg
Normal value for water, intermittent release	0,028	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	1,29	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				1,5 mg/kg/d				
Inhalation			0,18 mg/m3	0,18 mg/m3			0,51 mg/m3	0,51 mg/m3
Skin				1,5 mg/kg/d				3 mg/kg bw/d

## toluene

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	190	50	380	100	SKIN
VLEP	BEL	77	20	384	100	SKIN
TLV	BGR	150		300		
MAK	CHE	190	50	760	200	SKIN
VME/VLE	CHE	190	50	760	200	SKIN
TLV	CZE	200		500		SKIN
AGW	DEU	190	50	760	200	SKIN
MAK	DEU	190	50	760	200	
TLV	DNK	94	25			SKIN
VLA	ESP	192	50	384	100	SKIN



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TLV	EST	192	50	384	100	SKIN
VLEP	FRA	76,8	20	384	100	SKIN
HTP	FIN	81	25	380	100	SKIN
TLV	GRC	192	50	384	100	
AK	HUN	190		760		
GVI/KGVI	HRV	192	50	384	100	SKIN
VLEP	ITA	192	50			SKIN
OELV	IRL	192	50	384	100	SKIN
VL	LUX	192	50	384	100	SKIN
RD	LTU	192	50	384	100	SKIN
RV	LVA	50	14	150	40	SKIN
TLV	NOR	94	25			SKIN
TGG	NLD	150		384		
VLE	PRT	192	50	384	100	SKIN
NDS/NDSch	POL	100		200		
TLV	ROU	192	50	384	100	SKIN
NGV/KGV	SWE	192	50	384	100	SKIN
NPEL	SVK	192	50	384		SKIN
MV	SVN	192	50	384	100	SKIN
WEL	GBR	191	50	384	100	SKIN
OEL	EU	192	50	384	100	SKIN

## Predicted no-effect concentration - PNEC

Normal value in fresh water	0,68	mg/l
Normal value in marine water	0,68	mg/l
Normal value for fresh water sediment	16,39	mg/kg/d
Normal value for marine water sediment	16,39	mg/kg/d
Normal value for water, intermittent release	0,68	mg/l
Normal value of STP microorganisms	13,61	mg/l
Normal value for the food chain (secondary poisoning)	2,89	mg/kg soil dw

## 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				8,13 mg/kg bw/d				
Inhalation	226 mg/m3	226 mg/m3	56,5 mg/m3	56,5 mg/m3	384 mg/m3	384 mg/m3	192 mg/m3	192 mg/m3
Skin				226 mg/kg bw/d				384 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





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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

They have a wear time that depends on the duration and the use mode.

## SKIN PROTECTION

Wear category I 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 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	yellow	Temperature: 20 °C
Odour	characteristic	
Melting point / freezing point	0 °C	Method: literature data Substance: WATER
Initial boiling point	not available	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



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Upper explosive limit	not available	relevant to the safety and classification of this product. 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	10,6 - 11,4	Method: internal method Concentration: 100 % Temperature: 20 °C
Kinematic viscosity	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Solubility	Complete in water	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 does not apply to blends
Vapour pressure	not available	Method: datum of literature Substance: WATER Vapour pressure: 17,5 mmHg Temperature: 20 °C
Density and/or relative density	1 g/cm3	Temperature: 20 °C
Relative vapour density	0,0006	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
Corrosiveness	not available	Remark: Classification pursuant to Reg. (EC)



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Explosive properties

not available

1272/2008 as not corrosive based on calculation method.

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 dangers of reaction with other substances under normal conditions of use.

#### ETHANOLAMINE

No dangerous reaction if the prescriptions/indications for storage and manipulation are respected.

Metal corrosion: a corrosive effect of the metal is not to be foreseen. Aluminum steel

Flatable gases formation: flammable gases are not formed in the presence of water.

#### TOLUENE

Avoid exposure to: light.

### 10.2. Chemical stability

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

#### ETHANOLAMINE

The product is stable if the prescriptions/indications for manipulation and storage are respected.

### 10.3. Possibility of hazardous reactions

Under normal conditions of use and storage, dangerous reactions are not foreseeable.

#### ETHANOLAMINE

May react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong acids, vinyl acetate, cellulose nitrate.

Reactions with oxidant agents. The reaction has decorated exothermic. Reactions with acids. Reactions with halogenate compounds. Reactions with acid chlorides. Incompatible with acid chlorides and acid anhydrides.

#### TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

### 10.4. Conditions to avoid

None in particular. However, follow the usual precautions regarding chemical products.

#### ETHANOLAMINE

Avoid exposure to: air, sources of heat.



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Avoid extreme temperatures. Refer to section 7 SDS

## 10.5. Incompatible materials

Strong acids, oxidizing agents.  
Do not mix with other chemicals.

ETHANOLAMINE

Incompatible with: iron, strong acids, strong oxidants.  
Subjects to avoid: oxidants, isocyanati, acid anhydrides, acids, acids, acids, substances that form them, copper alloys, sweet steel.

## 10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of fire, gases and vapors potentially harmful to health such as carbon dioxide, carbon monoxide and irritating fumes can be released.

ETHANOLAMINE

May develop: nitric oxide, carbon oxides.

No dangerous decomposition product if you respect the prescriptions for the warehouse and manipulation.  
Possible thermal decomposition products: carbon oxides, nitrogen oxides, nitrous gases.

## 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

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

No information is available on the mixture, but information available on the relevant substances is listed.

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

No data available.

ETHANOLAMINE

MEA applied topically penetrates the skin, is widely distributed and extensively metabolized in the body. One of the main sites for metabolism is the liver. Extensive metabolism was indicated by the incorporation of radiolabeled carbon into hepatic amino acids, proteins, and phospholipids. Urea and glycine were the major urinary metabolites of MEA.

Regarding a quantitative data for skin absorption, the results of in vivo studies are preferable to the results of in vitro studies. In the in vivo study (Klain, 1985) the potential absorbed dose amounted to approximately 75% after 24 hours of exposure. Since workers are not externally exposed for more than 8 hours and assuming that a lower amount of substance was present in the skin (potentially absorbed amount) at t=8 hours compared to t=24 hours and that not the entire amount of substance present in the skin will eventually become systemically available, a correction factor of 2 will be used to derive the workers' dermal absorption value, i.e.  $75/2 = 37.5\%$ . A figure of 75% is proposed for consumers as the default exposure duration for consumers is 24 hours (note that this is a very conservative value for consumers as consumers will likely not be exposed for 24 hours per day).

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#### Information on likely routes of exposure

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

Usually inhalation and cutaneous exposure are the most likely routes, rarely oral.

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



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## TOLUENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

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

No information is available on the mixture, but information available on the relevant substances is listed. For the effects, please refer to the other subsections in this section and to section 4 of this sheet.

## 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)

## ETHANOLAMINE

Exposure of rats to the test substance for 28 days by inhalation caused concentration-related lesions in the larynx, trachea and lungs. No histopathological effects were observed in any organs other than the respiratory tract. The NOAEC for systemic toxicity is the highest tested concentration of 150 mg/m<sup>3</sup>. The NOAEC for local effects is the lowest tested concentration of 10 mg/m<sup>3</sup>. In the two-generation oral reproductive toxicity study with the test substance (HCl), the NOAEL for general systemic toxicity was set at 300 mg/kg body weight/day based on reduced food consumption and/or increased body weight, as well as organ weight changes unaccompanied by histopathological findings.

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## TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

### Interactive effects

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

## TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

## 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)

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

LD50 (Dermal):

> 2000 mg/kg rabbit

LD50 (Oral):

> 300 mg/kg rat

## ETHANOLAMINE

LD50 (Dermal):

2504 mg/kg bw Rabbit; OECD 402

LD50 (Oral):

> 1089 mg/kg Rat, OECD 401

LC50 (Inhalation vapours):

> 1,3 mg/l air/6 h Rat

## toluene

LD50 (Dermal):

> 5000 mg/kg bw Rabbit

LD50 (Oral):

> 5000 mg/kg bw Rat

LC50 (Inhalation vapours):

100 ppm human

## SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

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

On rabbits: No skin irritation

Own test values/bibliographic values

group observation



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

## ETHANOLAMINE

Evaluation of the irritating effect: corrosive! Damages skin and eyes.

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

## 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

Does not meet the classification criteria for this hazard 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

## ETHANOLAMINE

Evaluation of the sensitizing effect:

Animal tests have not shown sensitizing action.

Experimental/calculated data:

Guinea Pig Maximization Test Porcellino d'Ondia: non -sensitizing (Oecd - Guideline 406)

## GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

## 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.

## ETHANOLAMINE

Mutagenicity evaluation:

The substance did not prove to be mutagen on bacteria. No mutagenic effect was found in

Various experiments on cellular crops and mammals.

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

## 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.



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## ETHANOLAMINE

Carcinogenicity assessment: no available data.

## toluene

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999). The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

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

Not classifiable based on available information.

## ETHANOLAMINE

Evaluation of toxicity for reproduction:

Animal experiments have not highlighted a decrease in fertility, at non -toxic doses for parents parents. The product has not been tested. The indications are derived from substances/products of composition or similar structure.

## 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)

## ETHANOLAMINE

Evaluation of teratogenicity: animal tests have not highlighted fetal damage.

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

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

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

## ETHANOLAMINE

Single Stot evaluation: it can irritate the respiratory tract.

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

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

La sostanza o miscela non è classificata come intossicante di un organo bersaglio specifico, per esposizione ripetuta.

## ETHANOLAMINE

Assessment of toxicity following repeated administration:

After repeated administration, no specific organ toxicity of the substance.

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class



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

ETHANOLAMINE  
No aspiration risk is expected.

## 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

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*

ETHANOLAMINE

LC50 - for Fish

> 100 mg/l/96h *Oryzias latipes*; OECD 203

EC50 - for Crustacea

27,04 mg/l/48h *Daphnia magna*; OECD 202

EC50 - for Algae / Aquatic Plants

0,7 mg/l/72h *Pseudokirchneriella subcapitata*; OECD 201

Chronic NOEC for Fish

1,24 mg/l *Oryzias latipes*; OECD 210

Chronic NOEC for Crustacea

0,85 mg/l *Daphnia magna*; OECD 211

toluene

LC50 - for Fish

5,5 mg/l/96h *Oncorhynchus kisutch*

EC50 - for Crustacea

3,78 mg/l

EC50 - for Algae / Aquatic Plants

134 mg/l/3 h *Chlorella vulgaris* and *Chlamydomonas angulosa*

Chronic NOEC for Algae / Aquatic Plants

10 mg/l/72 h *Skeletonema costatum*

### 12.2. Persistence and degradability

ALCOHOLS, C12-13, BRANCHED AND  
LINEAR, ETHOXYLATED

Rapidly degradable

ETHANOLAMINE

Solubility in water

> 1000 g/l

Rapidly degradable

>90%; 21d; OECD 301A

toluene





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Solubility in water 100 - 1000 mg/l  
Rapidly degradable

## 12.3. Bioaccumulative potential

ETHANOLAMINE

Partition coefficient: n-octanol/water -2,3 OECD 107

toluene

Partition coefficient: n-octanol/water 2,73

BCF 90

## 12.4. Mobility in soil

ALCOHOLS, C12-13, BRANCHED AND  
LINEAR, ETHOXYLATED

Partition coefficient: soil/water 3,69

ETHANOLAMINE

Partition coefficient: soil/water 1,16

toluene

Partition coefficient: soil/water 2,31

## 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.



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## 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

### 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	Citral REACH Reg.: 01-2119462829-23
Point	75	ETHANOLAMINE REACH Reg.: 01-2119486455-28
Point	75	(R)-P-MENTHA-1,8-DIENE REACH Reg.: 01-2119529223-47
Point	75	TRISODIUM 8-HYDROXYPYRENE-1,3,6-TRISULPHONATE REACH Reg.:



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Point  
Point

75  
75

01-2120115886-50  
geraniol REACH Reg.: 01-2119552430-49  
p-mentha-1,3-diene

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 1: Low hazard to waters

## 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. 2</b>	Flammable liquid, category 2
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2



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<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H361d</b>	Suspected of damaging the unborn child.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<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>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

## 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



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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)

- 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:

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