



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

1 of 18

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

### 1.1. Product identifier

Code: F\_159  
Product name: Vinegar CLEANER  
UFI: CCY5-P0NA-F00X-TSK5

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

Identified Uses	Industrial	Professional	Consumer
hard surface cleaner	-	✓	✓

### 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 emergency number: 112

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

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

Hazard classification and indication:

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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

2 of 18

Hazard statements:

<b>H319</b>	Causes serious eye irritation.
Precautionary statements:	
<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P264</b>	Wash your hands thoroughly after use.
<b>P280</b>	Wear eye protection / face protection.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P337+P313</b>	If eye irritation persists: Get medical advice / attention.

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

Less than 5% Cationic surfactants, Non-ionic surfactants

Disinfectants (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

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>acetic acid 4,8%</b>		
INDEX 607-002-00-6	$4,5 \leq x < 5$	Flam. Liq. 3 H226, Skin Corr. 1A H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B
EC 200-580-7		Skin Corr. 1A H314: $\geq 90\%$ , Skin Corr. 1B H314: $\geq 25\%$ , Skin Irrit. 2 H315: $\geq 10\%$ , Eye Dam. 1 H318: $\geq 25\%$ , Eye Irrit. 2 H319: $\geq 10\%$
CAS 64-19-7		
REACH Reg. 01-2119475328-30		
<b>ETHANOL</b>		
INDEX 603-002-00-5	$1,5 \leq x < 2$	Flam. Liq. 2 H225, Eye Irrit. 2 H319
EC 200-578-6		Eye Irrit. 2 H319: $\geq 50\%$



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

3 of 18

CAS 64-17-5

REACH Reg. 01-2119457610-43

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

INDEX -

$1 \leq x < 1,5$

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

EC 931-954-4

CAS 160901-19-9

REACH Reg. 01-2119490233-42

## QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16- ALKYLDIMETHYL, CHLORIDES

INDEX -

$0,2 \leq x < 0,25$

Acute Tox. 4 H302,  
Skin Corr. 1B H314,  
Eye Dam. 1 H318,  
Eye Dam. 1 H318,  
Aquatic Acute 1 H400 M=10,  
Aquatic Chronic 1 H410 M=1  
LD50 Oral: 795 mg/kg

EC 270-325-2

CAS 68424-85-1

REACH Reg. 01-2119965180-41

## MORPHOLINE

INDEX 613-028-00-9

$0 \leq x < 0,05$

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,  
STA Dermal: 1100 mg/kg,  
STA Inhalation vapours: 11 mg/l

EC 203-815-1

CAS 110-91-8

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

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

4 of 18

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

5 of 18

equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

## 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

AUS	Österreich	Gesamte Rechtsvorschrift für Grenzwertverordnung 2021, Fassung vom 17.06.2021
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.5 от 17 Януари 2020г.)
CYP	Κύπρος	Οι περί Αζθάλειας και Υγείας ζηην Δπραζία (Φημικοί Πατάγονηερ) (Τποποιοηηκοί) Κανονιζμοί ηος 2019. Οι περί Ασφάλειας και Υγείας στην Εργασία (Καρκινογόνοι και Μεταλλαξιογόνοι Παράγοντες) (Τροποποιοηηκοί) Κανονισμοί του 2020
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
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
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemičkim na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
IRL	Éire	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
LUX	Luxembourg	Règlement grand-ducal du 24 janvier 2020 modifiant le règlement grand-ducal du 14 novembre 2016 concernant la protection des salariés contre les risques liés à l'exposition à des agents cancérigènes ou mutagènes au travail
LTU	Lietuva	Jsakymas dėl lietuvis higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
LVA	Latvija	Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §)
MLT	Malta	PROTECTION OF THE HEALTH AND SAFETY OF WORKERS FROM THE RISKS RELATED TO CHEMICAL AGENTS AT WORK REGULATIONS (S.L.424.24). PROTECTION OF WORKERS FROM THE RISKS RELATED TO EXPOSURE TO CARCINOGENS OR MUTAGENS AT WORK REGULATIONS (S.L.424.22)
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. august 2018 nr. 1255
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

6 of 18

POL	Polska	químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
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.
	TLV-ACGIH	ACGIH 2022

## acetic acid 4,8%

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	25	10	50	20	
VLEP	BEL	25	10	38	15	
TLV	BGR	25		37		
TLV	CYP	25	10			
TLV	CZE	25		35		
AGW	DEU	25	10	50	20	
MAK	DEU	25	10	50	20	
TLV	DNK	25	10			
VLA	ESP	25	10	37	15	
VLEP	FRA			25	10	
HTP	FIN	13	5	25	10	
TLV	GRC	25	10	37	15	
AK	HUN	25		25		
GVI/KGVI	HRV	25	10			
OELV	IRL	25	10	37	15	
VL	LUX	25	10			
RD	LTU	25	10			
RV	LVA	25	10			
TLV	NOR	25	10			
VLE	PRT	25	10			
NDS/NDSCh	POL	15		30		
NGV/KGV	SWE	13	5	25	10	
NPEL	SVK	25	10			
MV	SVN	25	10			
OEL	EU	25	10	50	20	
TLV-ACGIH		25	10	37	15	

Predicted no-effect concentration - PNEC



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

7 of 18

Normal value in fresh water	3,058	mg/l
Normal value in marine water	0,306	mg/l
Normal value for fresh water sediment	11,36	mg/kg
Normal value for marine water sediment	1,136	mg/kg
Normal value for water, intermittent release	30,58	mg/l
Normal value of STP microorganisms	85	mg/l
Normal value for the terrestrial compartment	0,47	mg/kg

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	25 mg/m3		25 mg/m3		25 mg/m3		25 mg/m3	

## ETHANOL

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	1900	1000	3800	2000	
VLEP	BEL	1907	1000			
TLV	BGR	1000				
TLV	CZE	1000		3000		
AGW	DEU	960	500	1920	1000	
MAK	DEU	960	500	1920	1000	
TLV	DNK	1900	1000			
VLA	ESP			1910	1000	
VLEP	FRA	1900	1000	9500	5000	
HTP	FIN	1900	1000	2500	1300	
TLV	GRC	1900	1000			
AK	HUN	1900		7600		
GVI/KGVI	HRV	1900	1000			
OELV	IRL				1000	
RD	LTU	1000	500	1900	1000	
RV	LVA	1000				
TLV	NOR	950	500			
TGG	NLD	260		1900		
NDS/NDSch	POL	1900				
NGV/KGV	SWE	1000	500	1900	1000	
NPEL	SVK	960	500	1920		
WEL	GBR	1920	1000			
TLV-ACGIH				1884	1000	

## Predicted no-effect concentration - PNEC

Normal value in fresh water	0,96	mg/l
Normal value in marine water	0,79	mg/l
Normal value for fresh water sediment	3,6	mg/kg



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

8 of 18

Normal value for marine water sediment	2,9	mg/kg
Normal value for water, intermittent release	2,75	mg/l
Normal value of STP microorganisms	580	mg/l
Normal value for the food chain (secondary poisoning)	0,38	mg/kg
Normal value for the terrestrial compartment	0,63	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				87 mg/kg bw/d				
Inhalation				114 mg/m3				950 mg/m3
Skin				206 mg/kg bw/d				343 mg/kg bw/d

## MORPHOLINE

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	36	10	36	10	Häufigkeit pro Schicht:4x
VLEP	BEL	36	10	72	20	SKIN
TLV	BGR	36	10	72	20	
TLV	CZE	35	9,66	70	19,32	
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
OELV	IRL	36	10	72	20	SKIN
VL	LUX	36	10	72	20	
RD	LTU	36	10	72	20	
RV	LVA	36	10	72	20	
TLV	MLT	36	10	72	20	
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





# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

9 of 18

WEL	GBR	36	10	72	20	SKIN
OEL	EU	36	10	72	20	
TLV-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

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

### 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 166).

### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

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

### ENVIRONMENTAL EXPOSURE CONTROLS

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

## SECTION 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Melting point / freezing point	0 °C	Method: literature data



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

10 of 18

Initial boiling point	100 °C	Substance: WATER Method: literature data Substance: WATER
Flammability	not available	Reason for missing data: The substance/mixture is not flammable
Lower explosive limit	not available	Reason for missing data: The substance/mixture is not explosive
Upper explosive limit	not available	Reason for missing data: The substance/mixture is not explosive
Flash point	> 100 °C	Method: ASTM D 93 Reason for missing data: The substance/mixture is not flammable
Auto-ignition temperature	not available	Reason for missing data: The substance/mixture does not self -have
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	2.5 ± 0.4	Method: internal method Temperature: 20 °C
Kinematic viscosity	not available	Reason for missing data: not determined
Solubility	Complete in water	Method: internal
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	0,02 Atm	Method: internal Substance: WATER Temperature: 20 °C
Density and/or relative density	1	Method: scaled scale and cylinder Temperature: 20 °C
Relative vapour density	0,0006	Method: internal Remark: kg/dm <sup>3</sup> 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

11 of 18

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 risks of reaction with other substances in normal conditions of use.

#### 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

The vapours may also form explosive mixtures with the air.

#### ACETIC ACID 4,8%

Risk of explosion on contact with: chromium (VI) oxide, potassium permanganate, sodium peroxide, perchloric acid, phosphorus chloride, hydrogen peroxide. May react dangerously with: alcohols, bromine pentafluoride, chlorosulphuric acid, dichromate-sulphuric acid, ethane diamine, ethylene glycol, potassium hydroxide, strong bases, sodium hydroxide, strong oxidising agents, nitric acid, ammonium nitrate, potassium tert-butoxide, oleum. Forms explosive mixtures with: air.

#### ETHANOL

Risk of explosion on contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulphur monofluoride, acetic anhydride, acids, concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercury nitrate, nitric acid, silver, silver nitrate, ammonia, silver oxide, ammonia, strong oxidising agents, nitrogen dioxide. May react dangerously with: bromoacetylene, chlorine acetylene, bromine trifluoride, chromium trioxide, chromyl chloride, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, black platinum, zirconium (IV) chloride, zirconium (IV) iodide. Forms explosive mixtures with: air.

### 10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

#### ACETIC ACID 4,8%

Avoid exposure to: sources of heat, naked flames.

#### ETHANOL

Avoid exposure to: sources of heat, naked flames.

### 10.5. Incompatible materials

#### ACETIC ACID 4,8%

Incompatible with: carbonates, hydroxides, phosphates, oxidising substances, bases.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

12 of 18

## 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

## 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

Information not available

#### Information on likely routes of exposure

Information not available

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

Information not available

#### Interactive effects

Information not available

#### 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)

#### ACETIC ACID 4,8%

LD50 (Dermal):	1060 mg/kg Rabbit
LD50 (Oral):	3310 mg/kg Rat
LC50 (Inhalation vapours):	11,4 mg/l/4h Rat

#### ETHANOL

LD50 (Oral):	> 5000 mg/kg Rat
LC50 (Inhalation vapours):	120 mg/l/4h Pimephales promelas

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

LD50 (Dermal):	> 2000 mg/kg rabbit
LD50 (Oral):	> 300 mg/kg rat

#### QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

LD50 (Oral):	795 mg/kg rat
--------------	---------------

#### MORPHOLINE

LD50 (Dermal):	500 mg/kg Rabbit
STA (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Oral):	1050 mg/kg Rat
LC50 (Inhalation vapours):	35,1 mg/l/1h Rat

#### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### RESPIRATORY OR SKIN SENSITISATION



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

13 of 18

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## 11.2. Information on other hazards

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

## SECTION 12. Ecological information

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*

ETHANOL

LC50 - for Fish

14200 mg/l/96h

EC50 - for Crustacea

454 mg/l/48h

EC50 - for Algae / Aquatic Plants

275 mg/l/72h

Chronic NOEC for Fish

250 mg/l

Chronic NOEC for Crustacea

96 mg/l

Chronic NOEC for Algae / Aquatic Plants

11,5 mg/l

ACETIC ACID 4,8%

LC50 - for Fish

> 1000 mg/l/96h

EC50 - for Crustacea

> 300,82 mg/l/48h

EC50 - for Algae / Aquatic Plants

> 1000 mg/l/72h

QUATERNARY AMMONIUM  
COMPOUNDS, BENZYL-C12-16-  
ALKYLDIMETHYL, CHLORIDES

LC50 - for Fish

0,85 mg/l/96h *Oncorhynchus mykiss*

EC50 - for Crustacea

0,016 mg/l/48h *Daphnia magna*

Chronic NOEC for Crustacea

0,025 mg/l *Daphnia magna*, 21d



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

14 of 18

## 12.2. Persistence and degradability

### MORPHOLINE

Solubility in water 1000 - 10000 mg/l

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

### ETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

### ACETIC ACID 4,8%

Solubility in water > 10000 mg/l

Rapidly degradable

QUATERNARY AMMONIUM  
COMPOUNDS, BENZYL-C12-16-  
ALKYLDIMETHYL, CHLORIDES  
Rapidly degradable

## 12.3. Bioaccumulative potential

### MORPHOLINE

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

BCF < 0,65

### ETHANOL

Partition coefficient: n-octanol/water -0,35

### ACETIC ACID 4,8%

Partition coefficient: n-octanol/water -0,17

QUATERNARY AMMONIUM  
COMPOUNDS, BENZYL-C12-16-  
ALKYLDIMETHYL, CHLORIDES  
Partition coefficient: n-octanol/water 2,88

## 12.4. Mobility in soil

### MORPHOLINE

Partition coefficient: soil/water -0,6196

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

### ACETIC ACID 4,8%

Partition coefficient: soil/water 1,153



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

15 of 18

## 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

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

#### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

16 of 18

## 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

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





# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

17 of 18

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>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<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
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<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>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

### 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 as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 18/12/2020

Revision n° 3

Rev. Date 09/02/2024

Page

18 of 18

- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- 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)
- 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

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

## CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

## Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.