



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 28/11/2018

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

### 1.1. Product identifier

Code: F\_365  
Product name: STEEL CLEANER  
UFI: E6S3-T0M4-9000-KQVX

### 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: 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 not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2020/878.

Hazard classification and indication: --

### 2.2. Label elements

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

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary

statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

### Ingredients (Regulation 648/2004)

Less than 5% Amphoteric surfactants, Non-ionic surfactants



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Perfumes

Preservation agents: 2-BROMO-2-NITROPROPANE-1,3-DIOL, GLUTARAL, BENZISOTHIAZOLINONE

## 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>PHOSPHORIC ACID ... %</b>		
INDEX 015-011-00-6	$2 \leq x < 2,5$	Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B
EC 231-633-2		Skin Corr. 1B H314: $\geq 25\%$ , Skin Irrit. 2 H315: $\geq 10\% - < 25\%$ , Eye Dam. 1 H318: $\geq 25\%$ , Eye Irrit. 2 H319: $\geq 10\% - < 25\%$ ATE Oral: 500 mg/kg
CAS 7664-38-2		
REACH Reg. 01-2119485924-24		
<b>CITRIC ACID MONOHYDRATE</b>		
INDEX -	$1 \leq x < 1,5$	Eye Irrit. 2 H319, STOT SE 3 H335
EC 201-069-1		
CAS 5949-29-1		
REACH Reg. 01-2119457026-42		
<b>DIPHENYL ETHER</b>		
INDEX -	$0 < x < 0,05$	Eye Irrit. 2 H319, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 202-981-2		
CAS 101-84-8		
REACH Reg. 01-2119472545-33		

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

## SECTION 4. First aid measures

### 4.1. Description of first aid measures



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No effects are expected that would require the implementation of special first aid measures. The following information is practical indications of correct behavior in case of contact with a chemical product, even if it is not dangerous.

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

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

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

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

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

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

## Rescuer protection

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

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

No known effects or symptoms in normal use.

In case of contact with skin: temporary skin irritation (redness, swelling, burning) may occur.

In case of contact with eyes: temporary eye irritation may appear (redness, swelling, burning, tearing).

In case of ingestion: accidental ingestion could cause gastrointestinal irritation (possible nausea, vomiting and diarrhea).

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

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

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

Treatment: Symptomatic treatment.

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

Running water for skin and eye washing.

## **SECTION 5. Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinction means

The extinction vehicles are the traditional ones: carbon dioxide, foam, dust and nebulized water.

Non -suitable extinction means

None in particular.

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

Dangers due to exposure in case of fire

Avoid breathing combustion products.

Combustion can produce gas and vapors potentially harmful to health such as carbon dioxide, carbon monoxide, satisfying, nox and irritating fumes.

### **5.3. Advice for firefighters**

#### **GENERAL INFORMATION**

Cool the containers with jets of water to avoid decomposition of the product and the development of substances potentially dangerous to health. Always wear full fire protection equipment. Collect extinguishing water that must not be discharged into sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.



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## EQUIPMENT

Normal fire-fighting clothing, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire fighter boots (HO A29 or A30).

## SECTION 6. Accidental release measures

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

6.1.1. For those who do not intervene directly

Block the loss if there is no danger.

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

Remove the unnecessary staff.

6.1.2. For those who intervene directly

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

### 6.2. Environmental precautions

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

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

Aspire the product leakage in suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.

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

### 6.4. Reference to other sections

Any information regarding individual protection and disposal is shown to sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

There are no particular precautions, in any case, manipulating the product after consulting all the other sections of this safety card. Handle in compliance with good hygiene and industrial safety standards.

Avoid the dispersion of the product in the environment. Do not eat, nor drink, nor smoking during use.

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

Keep only in the original container. Keep the closed containers, in a well -ventilated place, sheltered from direct sunlight. Store the containers away from any incompatible materials, checking section 10.

### 7.3. Specific end use(s)

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



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## 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)
CYP	Κύπρος	Οι περί Ασφάλειας και Υγείας στην Εργασία (Καρκινογόνοι Παράγοντες, Μεταλλαξιογόνοι Παράγοντες ή Τοξικές για την Αναπαραγωγή Ουσίες) (Τροποποιητικοί) Κανονισμοί του 2023, οι οποίοι εκδόθηκαν από το Υπουργικό Συμβούλιο, δυνάμει του άρθρου 38 του περί Ασφάλ
CZE	Česká Republika	NÁŘÍZENÍ VLÁDY ze dne 18. října 2023, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe
DNK	Danmark	BEK nr 291 af 19/03/2024 (Historisk) Bekendtgørelse om grænseværdier for stoffer og materialer (kemiske agenser) i arbejdsmiljøet
ESP	España	Límites de exposición profesional para agentes químicos en España 2024
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία``»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	PRAVILNIK O IZMJENAMA I DOPUNAMA PRAVILNIKA O ZAŠTITI RADNIKA OD IZLOŽENOSTI OPASNIM KEMIČALIJAMA NA RADU, GRANIČNIM VRIJEDNOSTIMA IZLOŽENOSTI I BIOLOŠKIM GRANIČNIM VRIJEDNOSTIMA
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
IRL	Éire	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)
LUX	Luxembourg	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
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" Oficiālā lāas publikācijas Nr.: 2024/65.2
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. 10. april 2024 kl. 13.55
NLD	Nederland	Regeling van de Minister van Sociale Zaken en Werkgelegenheid van 13 mei 2024, nr. 2024-0000092805, tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2022/431
PRT	Portugal	Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	HOTĂRÂRE nr. 179 din 28 februarie 2024 pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți ca
SWE	Sverige	Arbetsmiljöverkets föreskrifter och allmänna råd (AFS 2023:14) om gränsvärden för luftvägsexponering i arbetsmiljön
SVK	Slovensko	121_2024 Z. z. Nariadenie vlády o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénym, mutagénym alebo reprodukčne toxickým faktorom pri práci
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.



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## PHOSPHORIC ACID ... %

### Threshold Limit Value

Type	Country	TWA/8h	STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	1		2	
VLEP	BEL	1		2	
TLV	BGR	1		2	
MAK	CHE	1		2	
VME/LE	CHE	1		2	
TLV	CYP	1		2	
TLV	CZE	1		2	
AGW	DEU	2		4	INHAL
MAK	DEU	2		4	INHAL
TLV	DNK	1			
VLA	ESP	1		2	
VLEP	FRA	1	0,2	2	0,5
HTP	FIN	1		2	
TLV	GRC	1		3	
AK	HUN	1		2	
GVI/KGVI	HRV	1		2	
VLEP	ITA	1		2	
OELV	IRL	1		2	
VL	LUX	1		2	
RD	LTU	1		2	
RV	LVA	1		2	
TLV	NOR	1			
TGG	NLD	1		2	
VLE	PRT	1		2	
NDS/NDSch	POL	1		2	
NGV/KGV	SWE	1		3	
NPEL	SVK	1		2	
WEL	GBR	1		2	
OEL	EU	1		2	

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,1 mg/kg bw/d				
Inhalation			0,36 mg/m3	4,57 mg/m3			1 mg/m3	10,7 mg/m3

## CITRIC ACID MONOHYDRATE

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,44	mg/l
Normal value in marine water	0,044	mg/l



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Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Normal value of STP microorganisms	1000	mg/l
Normal value for the terrestrial compartment	33,1	mg/kg

## DIPHENYL ETHER

### Threshold Limit Value

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

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0017	mg/l
Normal value in marine water	0,00017	mg/l
Normal value for fresh water sediment	0,345	mg/kg
Normal value for marine water sediment	0,0345	mg/kg
Normal value for water, intermittent release	0,017	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0681	mg/kg

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					14	7 mg/m3	9,68 mg/m3	245,8 mg/m3
Skin							0,15 mg/cm2	25 mg/kg bw/d



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## Legend:

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

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

## 8.2. Exposure controls

Generic hygiene practice at work involves certain measures (for example, shower and change of clothes at the end of the work shift) in order to avoid Any type of third party contamination and appropriate cleaning practices (i.e. regular cleaning with adequate cleaning devices), do not eat and smoke in the workplace.

In general, inhalation and ingestion must be avoided. Unless different indications, shoes and work clothing must be worn certificates. Contaminated work clothing must not be brought out of the workplace.

Ensure good general ventilation in the place of and effective local aspiration.

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.

## HAND PROTECTION

Hand protection is not necessary under normal conditions of use, but if prolonged contact with the product is expected, it is recommended to protect the hands with category I work gloves (ref. standard EN 374).

Recommended materials: Natural Rubber - Latex (or equivalent material as it may cause sensitisation).

Protection class: 6 (permeation time greater than 480 minutes according to EN 374).

Recommended material thickness:  $\geq 0.1$  mm

When identifying the relevant material and the relative thickness to be used, it is highly recommended to consult directly with the PPE manufacturer to evaluate the effective protection based on use and duration of use.

For the final choice of work glove material, the following must be considered: compatibility, degradation, breaking time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. The gloves have a wear time that depends on the duration and method of use.

## SKIN PROTECTION

None required.

## EYE PROTECTION

None required.

## 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	colourless	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





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Flammability	not available	Reason for missing data: The substance/mixture is not flammable
Lower explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Upper explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Flash point	not available	Reason for missing data: The substance/mixture is not flammable
Auto-ignition temperature	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Decomposition temperature	not available	Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose
pH	2,1 - 2,9	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	not available	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	1,015 g/cm3	Method: internal Temperature: 20 °C
Relative vapour density	0,0006	Method: Literature data Remark: kg/dm3 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



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## 9.2.2. Other safety characteristics

Acid/alkaline reserve	not available	Remark: Tests on the buffer capacity of the substance/mixture was not performed.
Miscibility	not available	Remark: See section 9.1 Solubility
Corrosiveness	not available	Remark: Classification pursuant to Reg. (EC) 1272/2008 as not corrosive based on calculation method.
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 dangers of reaction with other substances under normal conditions of use.

PHOSPHORIC ACID ... %

Decomposes at temperatures above 200°C/392°F.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

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

PHOSPHORIC ACID ... %

Risk of explosion on contact with: nitromethane. May react dangerously with: alkalis, sodium borohydride.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

None in particular. Do not mix with other chemicals.

PHOSPHORIC ACID ... %

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.

### 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.



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PHOSPHORIC ACID ... %  
May develop: phosphoryl oxides.

## SECTION 11. Toxicological information

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

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

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

#### CITRIC ACID MONOHYDRATE

Citric acid is ubiquitous in the animal kingdom. No studies compliant with current OECD guidelines are available. However, there is sufficient information about the substance, since it is part of the metabolic processes of animals and plants. Therefore, the pathways of adsorption, distribution and excretion, as well as its metabolism, are well known and even essential for all living organisms.

##### Absorption

##### Oral absorption

Citric acid is easily absorbed by the digestive tract and is known to improve the absorption of other substances such as iron.

##### Skin absorption

The low skin absorption of citric acid has been accepted by the Scientific Committee on Consumer Products (SCCS, 2009).

##### Circulation and excretion

Amounts of citric acid ingested from natural sources and food additives can exceed 500 mg/kg per day. This amount constitutes only a part of the circulating citric acid, which mainly derives from metabolism. Part of the circulating substance is excreted in the urine, with approximately 0.29-0.71 g of citric acid excreted per person per day (OECD, 2001).

Source ECHA CHEM 10/25

#### 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.

#### 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.

#### CITRIC ACID MONOHYDRATE

##### Chronic Toxicity

No reliable 28- or 90-day studies are available, so this endpoint has been omitted. The most reliable studies are the 10-day studies on rats and mice, with the following results:

NOAEL (10 days) 4000 mg/kg body weight/day rats (sex not identified)

LD50 (10 days) 5660 (+/- 0.44) mg/kg body weight/day rats (sex not identified)

ECHA CHEM 10/25

#### Interactive effects

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

#### ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

#### PHOSPHORIC ACID ... %

LD50 (Dermal):

> 1260 mg/kg bw rabbit  
at the concentration of 85%

LD50 (Oral):

2600 mg/kg bw Rat

ATE (Oral):

500 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)



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LC50 (Inhalation mists/powders): 61 mg/m3 Guinea pig for 1 h

## CITRIC ACID MONOHYDRATE

LD50 (Dermal): > 2000 mg/kg Rat  
LD50 (Oral): 5400 mg/kg Mouse

## DIPHENYL ETHER

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

## SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE

No skin irritation (on rabbit) (guidelines 404 for the OECD test)

## SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE

Causes serious eye irritation. (Guidelines 405 for the OECD test)

## DIPHENYL ETHER

Species: on rabbit  
Evaluation: eye irritation  
Method: no information available.  
Result: slight to moderate eye irritation  
BPL: No

## RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE

Does not respond to the classification criteria for this danger class

## GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE

Does not respond to the classification criteria for this danger class

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE

Does not respond to the classification criteria for this danger class

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

## CITRIC ACID MONOHYDRATE



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Does not respond to the classification criteria for this danger class

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

CITRIC ACID MONOHYDRATE  
It can irritate the respiratory tract

## Target organs

CITRIC ACID MONOHYDRATE  
Respiratory system.

## Route of exposure

CITRIC ACID MONOHYDRATE  
Inhalation.

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

CITRIC ACID MONOHYDRATE  
It does not meet the classification criteria for this hazard class

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

CITRIC ACID MONOHYDRATE  
Does not respond to the classification criteria for this danger 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**

PHOSPHORIC ACID ... %

EC50 - for Crustacea

> 100 mg/l/48h Daphnia magna, freshwater

EC50 - for Algae / Aquatic Plants

> 100 mg/l/72h Desmodesmus subspicatus, freshwater

Chronic NOEC for Crustacea

56 mg/l Daphnia magna, freshwater

Chronic NOEC for Algae / Aquatic Plants

100 mg/l Desmodesmus subspicatus, freshwater

CITRIC ACID MONOHYDRATE



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LC50 - for Fish > 100 mg/l/96h

EC50 - for Crustacea > 50 mg/l/48h

Chronic NOEC for Algae / Aquatic Plants 425 mg/l

## DIPHENYL ETHER

LC50 - for Fish 4,2 mg/l/96h *Oncorhynchus mykiss*; OECD 203

EC50 - for Crustacea 1,7 mg/l/48h *Daphnia Magna*; OECD Guideline 202

EC50 - for Algae / Aquatic Plants 0,455 mg/l/72h *Pseudokirchneriella subcapitata*; OECD 201

Chronic NOEC for Fish 0,175 mg/l

Chronic NOEC for Crustacea 0,162 mg/l

Chronic NOEC for Algae / Aquatic Plants 0,24 mg/l

Pisces toxicity: CL50 (*Oncorhynchus Mykiss* (iride trout)): 4.2 mg/l

Exposure time: 96 h

Type of test: static test

Method: Guidelines 203 for the OECD test

BPL: No

Toxicity for *Daphnia e*

For other aquatic invertebrates

: Ce50 (*Daphnia Magna* (large water flea)): 1.96 mg/l

Exposure time: 48 h

Type of test: static test

Monitoring through analysis: yes

Method: Guidelines 202 for the OECD test

BPL: yes

Observations: Reach

CL50 (*Daphnia Magna* (large water flea)): 1 mg/l

Exposure time: 48 h

Monitoring through analysis: no

BPL: No

Observations: the value is given on the basis of the SAR/AAR method

Using Oecd Toolbox, Derek, Vega Qsar models

(Caesar models) etc.

CL50 (*Daphnia Magna* (large water flea)): 1.7 mg/l

Exposure time: 48 h

Type of test: static test

Monitoring through analysis: no

Method: EPA-660/3-75-009

BPL: No

Observations: Reach

Toxicity for algae/plants

aquatic

: Ce50r (*pseudokirchneriella subcapitata* (chlorophyll algae)):

0.455 mg/l

Exposure time: 72 h

Type of test: static test

Monitoring through analysis: yes

Method: 201 for OECD test guidelines

BPL: yes

Observations: Reach

Noec (*pseudokirchneriella subcapitata* (chlorophyll algae)):

0.24 mg/l

Exposure time: 72 h

Type of test: static test

Monitoring through analysis: yes

Method: 201 for OECD test guidelines

BPL: yes

Observations: Reach

## 12.2. Persistence and degradability



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PHOSPHORIC ACID ... %

Rapidly degradable

CITRIC ACID MONOHYDRATE

Rapidly degradable

DIPHENYL ETHER

Rapidly degradable

76%; 28d; OECD 301D

Biodegradability: Type of Test: Closed bottle essay

Result: quickly biodegradable.

Biodegradation: 76 %

Exposure time: 20 D

Method: 301D guidelines for the OECD test

## 12.3. Bioaccumulative potential

CITRIC ACID MONOHYDRATE

BCF 3,2

DIPHENYL ETHER

Partition coefficient: n-octanol/water 4,21 25°C

BCF 196 aquatic species

Bioaccumulation: Species: Oncorhynchus Mykiss (Iridea Trout)

Exposure time: 96 D

Bioconcentration factor (BCF): 196

Break coefficient: n octanol/water: log power: 4.21 (25 ° C)

## 12.4. Mobility in soil

DIPHENYL ETHER

Partition coefficient: soil/water 3,3

## 12.5. Results of PBT and vPvB assessment

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

## 12.6. Endocrine disrupting properties

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

## 12.7. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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



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

20 01 29\* - Detergents, containing dangerous substances

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

The release of waste in the sewer is strongly not recommended. The disposal of this product, solutions and any by-product must be carried out by always certifying the indications of the law on the protection of the environment and on the disposal of waste and the requirements of each relevant local authority.

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

## SECTION 14. Transport information

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

### 14.1. UN number or ID number

not applicable

### 14.2. UN proper shipping name

not applicable

### 14.3. Transport hazard class(es)

not applicable

### 14.4. Packing group

not applicable

### 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





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Point 40

## Contained substance

Point	75	Glutaraldehyde REACH Reg.: 01-2119455549-26
Point	75	PHOSPHORIC ACID ... % REACH Reg.: 01-2119485924-24
Point	75	1,2-benzisothiazol-3(2H)-one

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

Information not available

Regulation (EC) No. 648/2004

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

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

## 15.2. Chemical safety assessment

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

## SECTION 16. Other information

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

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Skin Corr. 1	Skin corrosion, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3



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<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H290</b>	May be corrosive to metals.
<b>H302</b>	Harmful if swallowed.
<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>H400</b>	Very toxic to aquatic life.
<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
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)



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- 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
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- 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 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.