



#### according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 1 of 13

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

#### 1.1. Product identifier

Chromic Acid 15 %

UFI: NVPG-N1QX-7001-5DD2

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

#### Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

#### Uses advised against

Any non-intended use.

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

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
Place: D-63069 Offenbach

Telephone: +49 (0) 69 / 400 3019-60 Telefax: +49 (0) 69 / 400 3019-64

E-mail: info@morphisto.de
Contact person: Morphisto GmbH

E-mail: gefahrstoffmanagement@morphisto.de

Internet: http://www.morphisto.de

1.4. Emergency telephone Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

number:

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### **GB CLP Regulation**

Acute Tox. 2; H330 Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1; H317 Muta. 1B; H340 Carc. 1A; H350 Repr. 2; H361f STOT SE 3; H335 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

# **GB CLP Regulation**

# Hazard components for labelling

chromium (VI) trioxide

Signal word: Danger



#### according to UK REACH Regulation

#### Chromic Acid 15 %

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 2 of 13

#### Pictograms:









#### **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eve damage.

Mav cause an allergic skin reaction. H317

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer.

H361f Suspected of damaging fertility.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

P260 Do not breathe mist/vapours/spray. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P391 Collect spillage.

Store in a well-ventilated place. Keep container tightly closed. P403+P233

#### Special labelling of certain mixtures

Restricted to professional users.

# Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:









#### **Hazard statements**

H314-H317-H330-H334-H340-H350-H361f-H372

#### **Precautionary statements**

P260-P280-P303+P361+P353-P305+P351+P338

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.



according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 3 of 13

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Chemical characterization**

aqueous solution

#### **Hazardous components**

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulation)					
1333-82-0	chromium (VI) trioxide					
	215-607-8	024-001-00-0	01-2119458868-17			
	Ox. Sol. 1, Carc. 1A, Muta. 1B, Repr. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H271 H350 H340 H361f H330 H311 H301 H314 H318 H334 H317 H335 H372 H400 H410					

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

- poome oone:				
CAS No	EC No	Chemical name	Quantity	
	Specific Conc. I	imits, M-factors and ATE		
1333-82-0	215-607-8	chromium (VI) trioxide	15 - < 20 %	
	inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: LD50 = 57 mg/kg; oral: LD50 = 52 mg/kg STOT SE 3; H335: >= 1 - 100			
	Aquatic Acute 1	; H400: M=10		

#### **Further Information**

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: chromium (VI) trioxide

#### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

# **General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

# After inhalation

No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Provide fresh air. Put victim at rest, cover with a blanket and keep warm. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Call a physician immediately.

# After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. Remove contaminated, saturated clothing immediately. In case of skin irritation, seek medical treatment. After contact with skin, wash immediately with: Water. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

# After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Adverse human health effects and symptoms: Gastric perforation. Rinse mouth thoroughly with water. Call a physician immediately. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.



according to UK REACH Regulation

#### Chromic Acid 15 %

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 4 of 13

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

No information available.

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

Treat symptomatically.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

High power water jet.

# 5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: No information available.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

# General advice

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Remove persons to safety.

In case of fire and/or explosion do not breathe fumes.

Provide adequate ventilation.

Avoid exposure.

Wear personal protection equipment. (See section 8.)

# 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

# 6.3. Methods and material for containment and cleaning up

# For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

# 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling



according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 5 of 13

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid exposure.

Wear suitable protective clothing. (See section 8.)

Provide adequate ventilation as well as local exhaustion at critical locations.

Use extractor hood (laboratory).

# Advice on protection against fire and explosion

No special fire protection measures are necessary.

# Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product. Remove contaminated clothing immediatley and dispose off safely. Wash contaminated clothing prior to re-use. Used working clothes should not be worn outside the work area. Street clothing should be stored seperately from work clothing.

#### Further information on handling

Do not use for injecting or spraying.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

#### Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Infectious substances. Radioactive substances. Gases under presussure. Peroxides. ammonium nitrate. Food and fodder Flammable liquids. Flammable solids Substances or mixtures which, in contact with water, emit flammable gases Pyrophoric liquids and solids

#### Further information on storage conditions

Keep/Store only in original container. Store small packages in a suitable, robust cabinet.

Store locked up.

storage temperature: 15-25°C

# 7.3. Specific end use(s)

Use as laboratory reagent.

#### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

#### 8.2. Exposure controls





# Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation as well as local exhaustion at critical locations. Use extractor hood (laboratory).

# Individual protection measures, such as personal protective equipment

#### Eye/face protection

Suitable eye protection: goggles. Tightly sealed safety glasses. EN 166



according to UK REACH Regulation

#### Chromic Acid 15 %

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 6 of 13

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Pull-over gloves of rubber.

Suitable material:

(penetration time (maximum wearing period): >= 8 h):

CR (polychloroprenes, Chloroprene rubber). (0,5 mm)

NBR (Nitrile rubber). (0,35 mm)

FKM (fluororubber). (0,4 mm)

PVC (Polyvinyl chloride). (0,5 mm)

Butyl rubber. (0,5 mm)

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Do not use for injecting or spraying. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

# **Environmental exposure controls**

Do not allow to enter into surface water or drains.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour: not determined Odour: not determined

Melting point/freezing point:

Boiling point or initial boiling point and

100 °C

boiling range:

Flammability: not determined Lower explosion limits: not determined not determined Upper explosion limits: Flash point: not determined Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): Viscosity / kinematic: not determined Water solubility: completely miscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density:

Relative vapour density:

Particle characteristics:

not determined
not determined
not determined
not determined
not applicable

#### 9.2. Other information



#### according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 7 of 13

# Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive. not determined

Oxidizing properties not determined

# Other safety characteristics

Evaporation rate: not determined
Solid content: not determined
Viscosity / dynamic: not determined

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Possibility of hazardous reactions. No information available.

#### 10.2. Chemical stability

Stable under normal storage and handling conditions.

# 10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent. No information available.

#### 10.4. Conditions to avoid

Keep away from heat.

#### 10.5. Incompatible materials

Keep away from: Base, Oxidizing agent, Peroxides. Reducing agents, strong.

# 10.6. Hazardous decomposition products

In case of fire may be liberated: No information available.

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in GB CLP Regulation

#### **Acute toxicity**

Fatal if inhaled.

Harmful if swallowed.

Harmful in contact with skin.

# **ATEmix** calculated

ATE (oral) 346,7 mg/kg; ATE (dermal) 2000 mg/kg; ATE (inhalation vapour) 3,330 mg/l; ATE (inhalation dust/mist) 0,3330 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
1333-82-0	chromium (VI) trioxide					
	oral	LD50	52 mg/kg	Rat	ECHA	OECD 401
	dermal	LD50	57 mg/kg	Rabbit	ECHA	OECD 402
	inhalation vapour	ATE	0,5 mg/l			
	inhalation dust/mist	ATE	0,05 mg/l			

# Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data)

Causes serious eye damage. (On basis of test data)

#### Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (chromium (VI) trioxide) May cause an allergic skin reaction. (chromium (VI) trioxide)

# Carcinogenic/mutagenic/toxic effects for reproduction



#### according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 8 of 13

May cause genetic defects. (chromium (VI) trioxide)

May cause cancer. (chromium (VI) trioxide)

Suspected of damaging fertility. (chromium (VI) trioxide)

#### STOT-single exposure

May cause respiratory irritation. (chromium (VI) trioxide)

#### STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure. (chromium (VI) trioxide)

#### **Aspiration hazard**

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

# 11.2. Information on other hazards

#### **Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
1333-82-0	chromium (VI) trioxide						
	Acute fish toxicity	LC50 mg/l	33,2	96 h	Pimephales promelas	ECHA	
	Acute crustacea toxicity	EC50 mg/l	0,035	48 h	Daphnia magna	ECHA	

# 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

#### 12.3. Bioaccumulative potential

No information available.

# 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

# 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

# **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Do not allow uncontrolled discharge of product into the environment.

#### **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods



#### according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 9 of 13

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

# List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

# List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

#### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING: ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

#### Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

14.1. UN number or ID number: UN 1755

14.2. UN proper shipping name: CHROMIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C1
Special Provisions: 518
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

# Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1755

14.2. UN proper shipping name: CHROMIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C1
Special Provisions: 518
Limited quantity: 1 L
Excepted quantity: E2



#### according to UK REACH Regulation

# Chromic Acid 15 % Product code: 16864.xxxxx

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 10 of 13

Marine transport (IMDG)

14.1. UN number or ID number: UN 1755

14.2. UN proper shipping name: CHROMIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions:

Limited quantity:

Excepted quantity:

EMS:

F-A, S-B

Segregation group:

1 - acids

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1755

14.2. UN proper shipping name: CHROMIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

0.5 L

Y840

Excepted quantity:

E2

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



# 14.6. Special precautions for user

Warning: strongly corrosive. Do not allow to enter into surface water or drains.

# 14.7. Maritime transport in bulk according to IMO instruments

No information available.

# **SECTION 15: Regulatory information**

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

# **EU** regulatory information

Authorisations (REACH, annex XIV):

chromium (VI) trioxide

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75





#### according to UK REACH Regulation

**Chromic Acid 15 %** 

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 11 of 13

Information according to 2012/18/EU

(SEVESO III):

**H2 ACUTE TOXIC** 

Additional information: E1

Additional information

This substance is hazardous in the sense of regulation (EC) No 1272/2008 (CLP).

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning. Causes

allergic hypersensitivity reactions.

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### **SECTION 16: Other information**

#### Changes

Rev. 1.00; 13.07.2023; Initial release

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal Dosis, 50 percent

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor



#### according to UK REACH Regulation

#### **Chromic Acid 15 %**

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 12 of 13

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations).

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 2; H330	Calculation method
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H312	Calculation method
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Muta. 1B; H340	Calculation method
Carc. 1A; H350	Calculation method
Repr. 2; H361f	Calculation method
STOT SE 3; H335	Calculation method
STOT RE 1; H372	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 2; H411	Calculation method

# Relevant H and EUH statements (number and full text)

H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312	Harmful if swallowed or in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
11004	NA

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.
H340 May cause genetic defects.

H350 May cause cancer.

H361f Suspected of damaging fertility.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.





according to UK REACH Regulation

**Chromic Acid 15 %** 

Revision date: 13.07.2023 Product code: 16864.xxxxx Page 13 of 13

H411

Toxic to aquatic life with long lasting effects.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine

Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. Bestehende Gesetze und Bestimmungen sind vom Empfänger unserer Produkte in eigener Verantwortung zu beachten.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)