

# SAFETY DATA SHEET DEOX EXTRA

According to EC Regulation 1907/2006/EC - revision 2020/878

Revision No. 4.6

Print Date 06/07/2022

Creation Date 02/02/2015

Revision Date 30/01/2022

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

### 1.1. Product identifier

Product name DEOX EXTRA  
Product Code 11001296X1 (CLP)  
UFI: TET2-205H-600N-7SC1

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

#### Recommended use

Acid cleaner and descaler.

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

NCH UK & Ireland, Arrowmure House, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502  
E-mail address technical\_uk@nch.com  
Website address www.ncheurope.com

### 1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)  
In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Corrosive to metals: Category 1  
Skin corrosion: Category 1B  
Serious damage to eyes: Category 1  
H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage

### 2.2. Label elements

#### Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains HYDROCHLORIC ACID.

#### Hazard pictograms



Signal word DANGER

#### Hazard Statements

H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage

#### Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.  
P310 - Immediately call a POISON CENTER or doctor  
P260 - Do not breathe vapors.  
P280 - Wear protective gloves/protective clothing/eye protection.  
For industrial and institutional use only.  
Keep out of reach of children.

### 2.3. Other hazards

Due to pH level, product is classed as corrosive.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

## SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

**3.2 Mixture**

Chemical Name	CAS-No.	EC No.	EU - REACH reg number	Weight-%	EU - GHS/CLP Classification	Notes
HYDROCHLORIC ACID	7647-01-0	231-595-7	01-2119484862-27	5 - < 10	Skin Corr. 1B (H314) STOT SE 3 (H335) Met Corr.1 (H290)	B
CITRIC ACID	77-92-9	201-069-1	01-2119457026-42	1 - < 3	Eye Irrit. 2 (H319) STOT SE 3 (H335)	
ALIPHATIC ALCOHOL, C13-15 LARGELY LINEAR, ETHOXYLATED POLYMER	157627-86-6	500-337-8	-	< 1	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	

For any H statements mentioned in this section, see the full text in section 16.

Chemical Name	EU - CLP (1272/2008) - Specific Concentration Limits
HYDROCHLORIC ACID	H319 10%≤C<25% H314 C≥25% H315 10%≤C<25% H335 C≥10%

**SECTION 4. FIRST AID MEASURES****4.1. Description of first aid measures**General advice

Do not breathe vapours or spray mist. Do not get in eyes, on skin or on clothing.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water ( not hot water) when rinsing. Get medical attention immediately.

Skin Contact

Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth. Drink 1 or 2 glasses of water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

Inhalation

Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately. If exposed to high concentrations of the vapours / mists, move to fresh air.

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

No information available.

Eye contact

May cause burns which could lead to permanent eye damage.

Skin contact

May cause burns on prolonged or repeated exposure.

Ingestion

Ingestion may result in severe burns to the mouth, throat and digestive tract.

Inhalation

Inhalation may result in irritation or burns to the respiratory tract.

**4.3. Indication of any immediate medical attention and special treatment needed**Notes to physician

Treat symptomatically. May cause burns of eyes, skin and mucous membranes.

**SECTION 5. FIRE-FIGHTING MEASURES****5.1. Extinguishing media**Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Water spray. Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

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

Thermal decomposition can lead to release of irritating gases and vapours. Hydrogen chloride gas.

Material can create slippery conditions.

**5.3. Advice for firefighters**

Firefighters should wear a self-contained breathing apparatus and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions. Ventilate the area.

**6.2. Environmental precautions**

Avoid release of neat product into surface water and sanitary sewage system.

**6.3. Methods and material for containment and cleaning up**Methods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

Refer to sections 7, 8 and 13.

**SECTION 7. HANDLING AND STORAGE****7.1. Precautions for safe handling**

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Training : Due to the hazardous nature of this product, training in its use is recommended. Ensure adequate ventilation.

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

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

**7.3. Specific end use(s)**

No information available.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters**Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Chemical Name	European Union	The United Kingdom	France	Germany	Austria
HYDROCHLORIC ACID	TWA 5 ppm TWA 8 mg/m <sup>3</sup> STEL 10 ppm STEL 15 mg/m <sup>3</sup>	STEL: 5 ppm aerosol mist and gas STEL: 8 mg/m <sup>3</sup> aerosol mist and gas TWA: 1 ppm aerosol mist and gas TWA: 2 mg/m <sup>3</sup> aerosol mist and gas	VLCT: 5 ppm VLCT: 7.6 mg/m <sup>3</sup>	AGW: 2 ppm AGW: 3 mg/m <sup>3</sup> Spitzenbegr.: 4 ppm Spitzenbegr.: 6 mg/m <sup>3</sup> MAK: 2 ppm MAK: 3.0 mg/m <sup>3</sup> Bem.: DFG, Y	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup> TWA: 5 ppm TWA: 8 mg/m <sup>3</sup>
CITRIC ACID				AGW: 2 mg/m <sup>3</sup> Spitzenbegr.: 4 mg/m <sup>3</sup> MAK: 2 mg/m <sup>3</sup> Bem.: DFG, Y	

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
HYDROCHLORIC ACID	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup> TWA: 5 ppm TWA: 7.6 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup> Ceiling: 2 ppm TWA: 5 ppm TWA: 8 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 8 mg/m <sup>3</sup> STEL: 10 ppm STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup> TWA: 8 mg/m <sup>3</sup>	STEL: 4 ppm STEL: 6 mg/m <sup>3</sup> TWA: 2 ppm TWA: 3 mg/m <sup>3</sup>
CITRIC ACID					STEL: 4 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>

Chemical Name	Denmark	Finland	Norway	Sweden	Czech
HYDROCHLORIC ACID	Ceiling: 5 ppm Ceiling: 8 mg/m <sup>3</sup>	HTP (15min): 5 ppm HTP (15min): 7.6 mg/m <sup>3</sup>	Grenseverdi: 5 ppm Grenseverdi: 7 mg/m <sup>3</sup>	NGV: 2 ppm NGV: 3 mg/m <sup>3</sup> KGV: 4 ppm	PEL: 8mg/m <sup>3</sup> NPK-P: 15mg/m <sup>3</sup>

				KGV: 6 mg/m <sup>3</sup>	
CITRIC ACID					PEL: 4mg/m <sup>3</sup>

Chemical Name	Poland	Ireland
HYDROCHLORIC ACID	NDSch: 10 mg/m <sup>3</sup> NDS: 5 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup> TWA: 5 ppm STEL: 10 ppm STEL: 15 mg/m <sup>3</sup>

## 8.2. Exposure controls

### Control parametres

Provide an eyewash station. Provide washing facilities.

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

Use personal protection equipment as per Regulation (EU) 2016/425.

### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 143 - P2 / P3 Particle filters. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

### Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested :. Short term use eg occasional contact or splash protection ;. Nitrile rubber (0.4 mm). Long term use eg continuous wear or immersion ;. Solvent-resistant gloves (butyl-rubber). Fluorinated rubber. For break through times, refer to glove manufacturers recommendations.

### Skin Protection

Body protection must be chosen based on activity and possible exposure, e.g. footwear (solid shoes, rubber boots), rubber apron, long-sleeved work clothing, impervious suit.

### Eye Protection

Safety glasses with side-shields. Approved to EN 166. For large volumes, faceshields should be used.

### General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Information below relates to typical values and does not constitute a specification.

<b>Appearance</b>	Purple	<b>Specific Gravity</b>	1.05
<b>Physical State</b>	Liquid	<b>Solubility</b>	Soluble in water
<b>Odour</b>	Acidic	<b>Autoignition Temperature</b>	Not combustible.
<b>pH</b>	0.10	<b>Viscosity</b>	Fluid
<b>Melting Point/Range</b>	-5 °C	<b>Explosive properties</b>	No information available
<b>Flash Point</b>	Not relevant	<b>Oxidizing Properties</b>	No information available.
<b>Evaporation Rate</b>	No information available.	<b>VOC Content (%)</b>	0 %
<b>Flammability Limits in Air %</b>	Not applicable.		
<b>Vapour pressure</b>	No information available.		
<b>Vapor Density</b>	No information available.		

### 9.2. Other information

No other information available

## SECTION 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Not considered as highly reactive. See further information below.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

### 10.4. Conditions to avoid

Reacts with most metals to produce flammable hydrogen gas.

### 10.5. Incompatible materials

Chlorine-based bleaching agents. Oxidising agents. Reducing agents. Strong bases.

### 10.6. Hazardous decomposition products

None under normal storage conditions and use.

Thermal decomposition can lead to release of irritating gases and vapours. Hydrogen chloride gas.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Product Information

The product itself has not been tested.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
HYDROCHLORIC ACID	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h
CITRIC ACID	= 3 g/kg ( Rat )	> 2000 mg/kg ( Rat )	

Sensitisation

No information available.

Skin contact

May cause burns on prolonged or repeated exposure.

Inhalation

Inhalation may result in irritation or burns to the respiratory tract.

Ingestion

Ingestion may result in severe burns to the mouth, throat and digestive tract.

Eye contact

May cause burns which could lead to permanent eye damage.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

STOT- single exposure

Based on available data, the classification criteria are not met

STOT- repeated exposure

Based on available data, the classification criteria are not met

Aspiration hazard

Based on available data, the classification criteria are not met

**11.2 Information on Other Hazards**

The product does not contain substances that have been identified as an endocrine disruptor

**SECTION 12. ECOLOGICAL INFORMATION****12.1. Toxicity**Product Information

The product itself has not been tested.

**Ecotoxicity effects**

pH values above 10.5 may be fatal to fish and other aquatic organisms. Contains substance(s) known to be hazardous to the aquatic environment.

Chemical Name	Toxicity to Fish	Water Flea	Toxicity to Algae
HYDROCHLORIC ACID	LC50 = 20,5 mg/l (pH 3,25)		
CITRIC ACID	LC50 = 1516 mg/L Lepomis macrochirus 96 h		

**12.2. Persistence and degradability**

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.

**12.3. Bioaccumulative potential**

Not likely to bioaccumulate. Component information below.

Chemical Name	log Pow
CITRIC ACID	-1.72

**12.4. Mobility in soil**

Soluble in water.

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

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

**12.6 Endocrine disrupting properties**

The product does not contain substances that have been identified as an endocrine disruptor

**12.7 Other adverse effects**

No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty remaining contents. Rinse with water. Empty containers should be taken for local recycling, recovery or waste disposal. Recycle according to official regulations.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

07 06 01\* aqueous washing liquids and mother liquors

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

## SECTION 14. TRANSPORT INFORMATION

### 14.1, 14.2, 14.3, 14.4.

<b>UN-No</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>EmS</b>	F-A, S-B

ADR / RID

<b>UN-No</b>	UN1789
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Classification Code</b>	C1
<b>Limited Quantity</b>	5 L
<b>Transport Cat. (Tunnel Restriction Code)</b>	3 (E)

IATA/ICAO

<b>UN-No</b>	UN1789
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>ERG Code</b>	8L

### 14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

### 14.6. Special precautions for user

No special precautions.

### 14.7 Maritime transport in bulk according to IMO instruments

Packaged product, not typically transported in IBC's

### Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

## SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

This is a detergent product and complies with the Detergent Regulation (EC) No.648/2004. . .

Labelling for contents (REGULATION (EC) No 648/2004 - 907/2006):

< 5% non-ionic surfactants,

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

## SECTION 16. OTHER INFORMATION

### Text of H statements mentioned in Section 3

H314 - Causes severe skin burns and eye damage. H331 - Toxic if inhaled. H335 - May cause respiratory irritation. H302 - Harmful if swallowed. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

On the basis of test data. H314 - Causes severe skin burns and eye damage.

**Prepared By** Austen Pimm

**Creation Date** 02/02/2015

**Revision Date** 30/01/2022

### Revision summary

CLP update. SDS sections updated 2 16

### Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

#### **Further Information**

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

#### **Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**