

SAFETY DATA SHEET BREX

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

Revision No. 4.5

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

1.1. Product identifier

Product name BREX
Product Code 11000476X1 (CLP)
UFI: MXW2-T0FS-R00X-AS7P

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 irritation: Category 2
Eye irritation: Category 2
STOT- single exposure: Category 3
H290 - May be corrosive to metals
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

2.2. Label elements

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

Contains HYDROCHLORIC ACID.

Hazard pictograms



Signal word Warning

Hazard Statements

H290 - May be corrosive to metals
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary Statements

P312 - Call a POISON CENTER or doctor if you feel unwell
P337 + P313 - If eye irritation persists: Get medical advice/attention
P234 - Keep only in original container
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P390 - Absorb spillage to prevent material damage
P261 - Avoid breathing vapors.
P280 - Wear protective gloves/protective clothing/eye protection.
Keep out of reach of children.
For industrial and institutional use only.

2.3. Other hazards

No additional hazards identified.

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	10 - < 20	Skin Corr. 1B (H314) STOT SE 3 (H335) Met Corr.1 (H290)	B
Oxydipropanol	25265-71-8	246-770-3	01-2119456811-38	< 0.3	-	

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

EU Notes

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different labelling since the hazards vary at different concentrations.

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. Get medical attention if irritation develops and persists.

Skin Contact

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

Ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. 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.

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

Sensitisation

No information available.

Eye contact

May cause severe irritation to eyes.

Skin contact

May cause irritation as itching or redness.

Ingestion

May cause gastrointestinal irritation seen as nausea, vomiting and diarrhoea.

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.

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 (CO₂). Dry chemical.

5.2. Special hazards arising from the substance or mixture

Contact with metals liberates hydrogen 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.

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 upMethods 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. 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. Further information about storage conditions: . .

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 ³ STEL 10 ppm STEL 15 mg/m ³	STEL: 5 ppm aerosol mist and gas STEL: 8 mg/m ³ aerosol mist and gas TWA: 1 ppm aerosol mist and gas TWA: 2 mg/m ³ aerosol mist and gas	VLCT: 5 ppm VLCT: 7.6 mg/m ³	AGW: 2 ppm AGW: 3 mg/m ³ Spitzenbegr.: 4 ppm Spitzenbegr.: 6 mg/m ³ MAK: 2 ppm MAK: 3.0 mg/m ³ Bem.: DFG, Y	STEL: 10 ppm STEL: 15 mg/m ³ TWA: 5 ppm TWA: 8 mg/m ³
Oxydipropanol				AGW: 100 mg/m ³ Spitzenbegr.: 200 mg/m ³ MAK: 100 mg/m ³ Bem.: DFG, Y Summe aus Dampf und Aerosolen	

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
HYDROCHLORIC ACID	STEL: 10 ppm STEL: 15 mg/m ³ TWA: 5 ppm TWA: 7.6 mg/m ³	STEL: 10 ppm STEL: 15 mg/m ³ Ceiling: 2 ppm TWA: 5 ppm TWA: 8 mg/m ³	TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³	STEL: 15 mg/m ³ TWA: 8 mg/m ³	STEL: 4 ppm STEL: 6 mg/m ³ TWA: 2 ppm TWA: 3 mg/m ³
Oxydipropanol					STEL: 280 mg/m ³ TWA: 140 mg/m ³

Chemical Name	Denmark	Finland	Norway	Sweden	Czech
HYDROCHLORIC ACID	Ceiling: 5 ppm	HTP (15min): 5 ppm	Grenseverdi: 5 ppm	NGV: 2 ppm	PEL: 8mg/m ³

	Ceiling: 8 mg/m ³	HTP (15min): 7.6 mg/m ³	Grenseverdi: 7 mg/m ³	NGV: 3 mg/m ³ KGV: 4 ppm KGV: 6 mg/m ³	NPK-P: 15mg/m ³
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Chemical Name	Poland	Ireland
HYDROCHLORIC ACID	NDSCh: 10 mg/m ³ NDS: 5 mg/m ³	TWA: 8 mg/m ³ TWA: 5 ppm STEL: 10 ppm STEL: 15 mg/m ³

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 14387 ABEK 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. Minimum breakthrough time of the glove material (protective index 4, breakthrough time: >120 min). 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 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.

Appearance	Light yellow	Specific Gravity	1.09
Physical State	Liquid	Solubility	Soluble in water
Odour	Acidic	Autoignition Temperature	Not combustable.
pH	0.1	Viscosity	Fluid
Melting Point/Range	-5 °C	Explosive properties	No information available
Boiling Point/Range	100 °C	Oxidizing Properties	No information available.
Flash Point	Not relevant	VOC Content (%)	0 %
Evaporation Rate	No information available.		
Flammability Limits in Air %	Not applicable.		
Vapour pressure	No information available.		
Vapor Density	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

Contact with metals liberates 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.

Contact with metals liberates hydrogen 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
Oxydipropanol	= 13300 mg/kg (Rat)	> 20 mL/kg (Rabbit)	> 2.34 mg/L (Rat) 4 h

Sensitisation

No information available.

Skin contact

May cause irritation as itching or redness.

Inhalation

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

Ingestion

May cause gastrointestinal irritation seen as nausea, vomiting and diarrhoea.

Eye contact

May cause severe irritation to eyes.

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

STOT- single exposure: Category 3

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

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)		
Oxydipropanol	LC50 > 1000 mg/L		

12.2. Persistence and degradability

Inorganic product which can not be eliminated from water through biological processes.

12.3. Bioaccumulative potential

There is no test data on any of the components of this mixture.

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:

06 01 02* Hydrochloric acid

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.**

IMDG/IMO

UN-No	UN1789
UN proper shipping name	Hydrochloric acid
Hazard Class	8
Packing Group	II
EmS	F-A, S-B

ADR / RID

UN-No	UN1789
Hazard Class	8
Packing Group	II
Classification Code	C1
Limited Quantity	1 L
Transport Cat. (Tunnel Restriction Code)	2 (E)

IATA/ICAO

UN-No	UN1789
Hazard Class	8
Packing Group	II
ERG Code	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.

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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. H335 - May cause respiratory irritation.

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

On the basis of test data. H290 - May be corrosive to metals. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

Prepared By Austen Pimm

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Revision Date 30/01/2022

Revision summary

CLP update. SDS sections updated 3 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