Product	Consolv Concrete Cleaner
Revision date	16 June 2017
Revision	1

Safety Data Sheet (SDS)

Section 1: Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Product name	**Consolv Concrete Cleaner**
Product no.	**INDCONSOLV**
Synonyms, Trade names	No information available.

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

Identified uses	Cleaning agent.
Uses advised against	Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier	Kitchenmaster NI Ltd 11 Comber Road Belfast BT8 8AN United Kingdom Tel: 028 9081477 02890812881
Contact person	sales@kitchenmaster-ni.com

1.4 Emergency telephone number

Emergency telephone	Emergency Telephone Number: 028 9081 4777 08:30 – 17:00 Monday to Thursday 08:30 – 16:30 Friday

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards	Not classified
Human health	Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT SE 3 - H335
Environment	Not classified

2.2 Label elements

Contains hydrochloric acid ... %

Label in accordance with (EC) no. 1272/2008

Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary statements

Prevention
P260 Do not breathe dust/fume/ gas/mist/vapours/spray.
Response
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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/physician.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
hydrochloric acid ... %	CAS-No.: 7647-01-0 EC No.: 231-595-7	Skin Corr. 1B - H314, STOT SE 3 - H335	10-30%
614-584-5 Alcohols, C11-1--secondary, ethoxylated propoxylated Alcohols, C11-15-secondary, ethoxylated propoxylated (12-EO + 37.7-PO)	CAS-No.: 68551-14-4 EC No.:	Aquatic Chronic 3 - H412	1-10%

The full text for all hazard statements are displayed in section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures

4.1 Description of first aid measures

General information Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue. NOTE: Effects may be delayed. Keep affected person under observation.

Inhalation If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. Give artificial respiration if the exposed person is not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention.

Ingestion Do not induce vomiting. Get medical attention immediately. Thoroughly rinse the mouth with water. Immediately give two glasses of water or milk, provided the victim is fully conscious. Never give anything by mouth to an unconscious person.

Skin contact Promptly flush contaminated skin with water, preferably under a shower, removing contaminated clothing while washing proceeds. Continue to rinse for 30 minutes. Do not try to neutralize. Get medical attention immediately. Continue to rinse.

Eye contact Rinse immediately with plenty of water. Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Continue rinsing with water for at least 15 minutes (lifting the upper and lower eyelids occasionally). Get medical attention immediately. Continue to rinse.

4.2 Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms include spasm, inflammation and edema of the larynx and bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, and nausea.

Inhalation May cause respiratory irritation. May cause serious damage to the lining of nose, throat and lungs.

Ingestion May cause burns to mucous membranes, throat, esophagus and stomach. May cause stomach pain or vomiting. Swallowing concentrated chemical may cause severe internal injury.

Skin contact Corrosive! Can cause redness, pain, and severe skin burns.

Eye contact Causes severe eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Following significant inhalation, observe for 48 hrs to exclude possibility of delayed lung damage. Treat symptomatically. Effects may be delayed. In the case of concentrated product: Skin contact produces varying degrees of chemical burns, from mild redness to deep necrosis; treat as a burn. Risk of permanent damage on contact with eyes. Patients should be checked by an eye specialist.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media	Use extinguishing media appropriate for surrounding materials. Use carbon dioxide, foam, dry chemical powder, water spray.
Unsuitable extinguishing media	None noted.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	May cause corrosion damage to metals. Hydrochloric acid gas (corrosive) or chlorine gas (toxic) may be formed on heating or in the event of contact with strong oxidants.
Unusual fire & explosion hazards	Harmful vapors may be emitted during a fire. In contact with metals the highly flammable gas hydrogen may be released.
Specific hazards	If heated, harmful vapours may be formed.

5.3 Advice for firefighters

Special fire fighting procedures	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Use water spray to cool containers. Evacuate all personnel, use protective equipment for fire fighting. Use a portable breathing apparatus when the product is involved in a fire. Do not release runoff from fire to drains or watercourses.
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not mix with other chemicals. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Do not smoke, eat or drink while using this product. Eliminate all sources of ignition. Wash hands after use. Read and follow manufacturer's recommendations. Do not touch or walk through spilled material. If necessary evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not wear contact lenses while using this product.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not allow to enter drains, sewers or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Spill clean up methods	DO NOT touch spilled material! Stop leak if possible without risk. Wear necessary protective equipment. When dealing with a spillage, please consult the section relating to suitable protective measures. Eliminate all ignition sources. Use non - metallic tools/containers for clean up. Absorb spillage with inert absorbent material, (vermiculite, dry sand or earth). Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

6.4 Reference to other sections

Reference to other sections	See section 1 for emergency contact. For personal protection, see section 8. For waste

disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling

Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. To dilute, always pour the acid carefully into the water – never pour water into acid. Do not wear contact lenses.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions

Take precautionary measures against static discharges. Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Do not store above eye height. Avoid contact with oxidising substances and bases. Store in containers of acid resistant material.

Storage class

Corrosive storage.

7.3 Specific end use(s)

Specific end use(s)

The identified uses are in section 1 of this Safety Data Sheet.

Usage description

Use only according to directions.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
hydrochloric acid ... %	OEL	5 ppm	8 mg/m^3	10 ppm	15 mg/m^3	
hydrochloric acid ... %	WEL	1 ppm	2 mg/m^3	5 ppm	8 mg/m^3	

Ingredient comments

OEL - Occulational Exposure Limit - Ireland, Occupational Exposure Limits 2016.
WEL - Workplace Exposure Limits - EH40/2005 Workplace exposure limits.

8.2 Exposure Controls

Protective equipment

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/145/143/149. The specific respirator selected must be based on contamination levels found in the work place.
Gas filter for acid inorganic gases/vapours such as SO2, HCl (e.g. EN 14387 Type E). ABEK (EN 14387). Consult manufacturer for specific advice. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Gloves must be inspected prior to use. Suggested material: PVC. Breakthrough time: >480 minutes. Layer thickness: 1.2 mm. Consult manufacturer for advice.
Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Eye protection

Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).

Other protection

The selected clothing must satisfy the European norm standard EN 943. Personal protective

	equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handing this product.
Hygiene measures	Observe normal hygiene standards. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash hands after use.
Process conditions	Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Bright red.
Odour	No odour information available.
Odour threshold - lower	No information available.
Odour threshold - upper	No information available.
pH-Value, Conc. Solution	1.00
pH-Value, Diluted solution	No information available.
Melting point	No information available.
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability state	No information available.
Flammability limit - lower(%)	No information available.
Flammability limit - upper(%)	No information available.
Vapour pressure	No information available.
Vapour density (air=1)	No information available.
Relative density	1.080g/cm^3 @ 20.00 °C
Bulk density	No information available.
Solubility	Soluble in water. Aqueous solutions are acidic.
Decomposition temperature	No information available.
Partition coefficient; n-Octanol/Water	No information available.
Auto ignition temperature (°C)	No information available.
Viscosity	No information available.
Explosive properties	Not classified as explosive.
Oxidising properties	No information available.

9.2 Other information

Molecular weight	No information available.
Volatile organic compound	No information available.
Other information	None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity Hydrochloric Acid reacts with: Metals, alkalis, carbonic minerals, oxidants, chromates, permanganates, sulphides , sulphites, hydrogen sulphites, pyro sulphites, and sodium azide.

10.2 Chemical stability

Stability Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions Do not add water directly to the product. It may cause a violent reaction. Attacks metals liberating flammable hydrogen gas. Reacts with alkali and organic bases with violent evolution of heat. Reacts with lime stone, marble, dolomite and other carbonic minerals with evolution of suffocating CO2 gas.
Reacts with sulphides with evolution of toxic H2S gas. Reacts with strong oxidants (bleaching agents, conc. H2O2, HNO3, etc. and their salts, chromates, permanganates, etc..) with evolution of toxic chlorine gas. Reacts with sulphites, hydrogen sulphites and pyro sulphites with evolution of toxic SO2 gas. Reacts with sodium azide to produce highly toxic and explosive hydrazoic acid.

Hazardous polymerisation Will not polymerise.

Polymerisation description No information.

10.4 Conditions to Avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5 Incompatible materials

Materials to avoid Reacts with metals producing flammable and explosive hydrogen gas. Reacts violently with oxidising agents, liberating toxic chlorine gas. Can liberate harmful gases from certain chemicals including cyanides, nitrites, sulphites, acetylides and formaldehyde. Liberates carbon dioxide from carbonates and bicarbonates.
Reacts with bases. The reaction may be violent with strong heat generation. Hydrochloric Acid reacts with: Metals, alkalis, carbonic minerals, oxidants, chromates, permanganates, sulphides , sulphites, hydrogen sulphites, pyro sulphites, and sodium azide.

10.6 Hazardous decomposition products

Hazardous decomposition products When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas. Combustion may produce sulfur oxides.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information No toxicological information for the overall finished product.

Acute toxicity (Oral LD50) No information available.

Acute toxicity (Dermal LD50) No information available.

Acute toxicity (Inhalation LD50) Hydrochloric Acid (CAS: 7647-01-0): 45.6 mg/L (aerosol, Rat, 5 minutes.) REACH dossier information.

Serious eye damage/irritation Causes serious eye irritation.

Skin corrosion/irritation The product is classified as a skin corrosion/irritation hazard.

Respiratory sensitisation No information available.

Skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Specific target organ toxicity - Single exposure:
STOT - Single exposure No information available.
Specific target organ toxicity - Repeated exposure:
STOT - Repeated exposure No information available.

Inhalation May cause respiratory irritation. May cause serious damage to the lining of nose, throat and lungs.
Ingestion May cause burns to mucous membranes, throat, esophagus and stomach. May cause stomach pain or vomiting. Swallowing concentrated chemical may cause severe internal injury.
Skin contact Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact Causes severe eye damage.
Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Routes of entry No information available.
Target organs Eyes, skin, digestive system, respiratory system.

Aspiration hazards: No information available.
Reproductive toxicity: No information available.

Name	LD50 oral	LD50 dermal	LD50 inhalation
hydrochloric acid ... %	900.00mg/kg Rabbit		

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish Hydrochloric Acid (CAS: 7647-01-0): LC50 96 hours 3.25 pH, Lepomis macrochirus (Bluegill.) REACH dossier information.
Acute toxicity - Aquatic invertebrates Hydrochloric Acid (CAS: 7647-01-0): EC50 (48 hours) 4.92 pH, Daphnia magna. REACH dossier information.
Acute toxicity - Aquatic plants Hydrochloric Acid (CAS: 7647-01-0): EC50 (72 hours) 4.82 pH, Chlorella vulgaris.
Acute toxicity - Microorganisms No information available.
Chronic toxicity - Fish No information available.
Chronic toxicity - Aquatic invertebrates No information available.
Chronic toxicity - Aquatic plants No information available.
Chronic toxicity - Microorganisms No information available.
Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Eco toxilogical information No ecological toxicity available on the overall finished product.

12.2 Persistence and degradability

Degradability The degradability of the product has not been stated. HCL: Freely dissociates to Hydrogen and Chlorine ions.
Biological oxygen demand No information available.
Chemical oxygen demand No information available.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.
Bioacculmation factor No information available.
Partition coefficient; n-Octanol/Water No information available.

12.4 Mobility in soil

Mobility Soluble in water.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB Substances.

12.6 Other adverse effects

Other adverse effects None known.

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose of waste and residues in accordance with local authority requirements. For waste disposal, use a licensed industrial waste disposal agent.

Section 14: Transport information

14.1 UN number

UN no. (ADR)	UN1760
UN no. (IMDG)	UN1760
UN no. (IATA)	UN1760

14.2 UN proper shipping name

ADR proper shipping name	CORROSIVE LIQUID, N.O.S. (hydrochloric acid ... %)
IMDG proper shipping name	CORROSIVE LIQUID, N.O.S. (hydrochloric acid ... %)
IATA proper shipping name	CORROSIVE LIQUID N.O.S. (hydrochloric acid ... %)

14.3 Transport hazard class(es)

ADR class	8
IMDG class	8
IATA class	8

Transport labels

14.4 Packing group

ADR/RID/ADN packing group	II
IMDG packing group	II
IATA packing group	II

14.5 Environmental hazards

ADR	No
IMDG	No
IATA	No

14.6 Special precautions for user

EMS	F-A, S-B
Emergency action code	A3
Hazard no. (ADR)	80
Tunnel restriction code	(E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	Workplace Exposure Limits Guidance Note EH40/2005. 2016 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	16 June 2017
Revision	1
Safety data sheet status	Approved.

Hazard statements in full

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.