SAFETY DATA SHEET

Knock Out Drain Cleaner

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

1.1. Product identifier

Product name Knock Out Drain Cleaner

Product number KOAKGEN

SDS number 10077

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

Identified uses Toilet and Drain Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier

Barrettine
Barrettine Works
St Ivel Way
Warmley
Bristol
BS30 8TY
Tel: 0117 960 0060
Fax: 0117 935 2437
sales@barrettine.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 1270 502891

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Skin Corr. 1A - H314

Environmental hazards

Not Classified

Classification (67/548/EEC or 1999/45/EC)

C;R35.

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P331+P310: If SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P315 Get immediate medical advice/attention.

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

P312 Call a POISON CENTER/doctor if you feel unwell.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulations.

Contains sulfuric acid

Supplementary precautionary statements

P260 Do not breathe vapour/spray.

P264 Wash contaminated skin thoroughly after handling.

P363 Wash contaminated clothing before reuse.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

sulfuric acid	**70 - 97%**
CAS number: 7664-93-9 **EC number:** 231-639-5 **REACH registration number:** 01-2119458838-20-XXXX	
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Corr. 1A - H314	C;R35.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Contact with eyes can cause redness, severe irritation and pain. Corneal burns may occur and eyes may be permanently damaged.

Inhalation

Symptoms of inhalation include tightness of chest and shortness of breath. Exposure may cause coughing and wheezing Congestion of the lungs and loss of consciousness can occur. Remove affected person from source of contamination. Get immediate medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel.

Ingestion

Ingestion may cause soreness and redness of the throat. The patient may have difficulty swallowing and corrosive burns may appear around the lips with nausea and stomach pain. Vomiting may occur.
Poisoning can cause shock, unconsciousness and convulsions and may even prove fatal. Immediately rinse mouth and drink copious amounts of water to dilute the swallowed chemical. Keep the patient under observation. Do not induce vomiting. If vomiting occurs keep head low.
Transport patient to hospital immediately and take these instructions.

Skin contact

Remove affected person from source of contamination. Irritation or pain may occur at the site of skin contact, accompanied by blistering and severe burning. Remove contaminated clothing and shoes. Wash skin thoroughly with soap and running water. Take especial care to clean folds, crevices, creases and groin.
Get medical attention if irritation persists or develops.
Launder clothing and clean shoes thoroughly before reuse.

Eye contact

Contact with eyes can cause redness, severe irritation and pain. Corneal burns may occur and eyes may be permanently damaged. Promptly rinse eyes with plenty of clean water while lifting the eyelids.
Continue to rinse for at least 15 minutes. Continue until the eyes are free of all traces of contamination.
Get immediate medical attention.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Cool containers exposed to fire with water spray. Do not use high pressure water jet as this may spread burning material.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours. Oxides of sulfur (SO2, SO3)

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Keep all unnecessary people away. Fire water run-off must not be allowed to contaminate ground or enter drains, sewers or water courses. Provide bunding against fire water run-off.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Keep unnecessary people at a safe distance.

6.2. Environmental precautions

Environmental precautions

Avoid or minimise the creation of any environmental contamination. Prevent discharge into drains, watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Do not touch or walk into spilled material. Neutralise spilled material with crushed limestone, soda ash or lime. Absorb in vermiculite, sand, diatomaceous earth or other inert absorbent material. Place into clearly labelled container for recovery or disposal (see section 13). Rinse site with copious amounts of water, which should not be allowed into drains, sewers or water courses.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Avoid spilling. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Provide adequate ventilation. Minimise all forms of skin contact. Overalls and footwear with oil and chemical resistant soles should be worn. Launder overalls and undergarments regularly. Never add water to this product as heat will be generated and product may 'spit'. Always add this product to water.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

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

contact with water. Stored containers should be routinely inspected for damage and/or leakage.

Storage class

Corrosive storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

sulfuric acid

Long-term exposure limit (8-hour TWA): WEL 0,05 mg/m3
Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

Ingredient comments

WEL = Workplace Exposure Limits

sulfuric acid (CAS: 7664-93-9)

DNEL	Industry - Inhalation; Short term local effects: 0.1 mg/m3 Industry - Inhalation; Long term local effects: 0.05 mg/m3
PNEC	- Fresh water; 0.0025 mg/l - Marine water; 0.00025 mg/l - water; 8.8 mg/l - Sediment (Freshwater); 0.002 mg/kg - Sediment (Marinewater); 0.0002 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear suitable protective gloves conforming to EN 374.
The actual level of protection provided by protective gloves can be difficult to assess. Effective breakthrough times should be used with care and a margin of safety should be applied. The UK HSE guidance recommends a safety factor of 75% be applied to times obtained by laboratory tests.
Seek advice from the manufacturer or supplier.
Personal hygiene is a major factor in effective hand care. Gloves should only be worn on clean hands. After using gloves, hands should be washed and thoroughly dried and a non-perfumed moisturiser applied.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Provide eyewash station and safety shower. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Knock Out Drain Cleaner

Liquid.

Colour

Colourless. to Brown.

Odour

Mild.

pH

pH (concentrated solution): <1

Initial boiling point and range

~200' C @ 80% H2SO4°C @

Relative density

~1.69 @ 77% H2SO4 @ °C

Solubility(ies)

Miscible in all proportions. Soluble in the following materials: Alcohols.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability

Stable under normal conditions of storage and use. See section 7.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid

Reacts violently with water with the evolution of heat. Avoid oxidising agents, reducing agents, strong bases and organic materials. Contact with combustible materials may cause fire.

10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Sulphurous gases (SOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

2,140

General information

Corrosive to all living tissue. Danger of very serious irreversible effects if swallowed - for symptoms see section 4.

Inhalation

May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Ingestion

May cause burns in mucous membranes, throat, oesophagus and stomach.

Skin contact

May cause serious chemical burns to the skin.

Eye contact

Causes burns. A single exposure may cause the following adverse effects: Corneal damage.

SECTION 12: Ecological Information

Knock Out Drain Cleaner

Ecotoxicity

This mixture (preparation) is readily biodegradable and is not expected to be hazardous to the environment.

12.1. Toxicity

Discharge of large quantities may kill fish and other aquatic life due to excessive changes in pH.

Acute toxicity - fish

LC_{50}, 96 hours: 42 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: 29 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability

Biodegradable. Discharge of large amounts causes changes in pH which may affect effluent and sewage treatment processes.

12.3. Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility

The product is soluble in water. The product is non-volatile.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Product is intended for household use. Small quantities may be disposed of by emptying into the drain whilst carefully flushing away with running water. Larger quantities should be diposed of in accordance with local authority requirements.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1830
UN No. (IMDG)	1830
UN No. (ICAO)	1830
UN No. (ADN)	1830

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	SULPHURIC ACID
Proper shipping name (IMDG)	SULPHURIC ACID
Proper shipping name (ICAO)	SULPHURIC ACID
Proper shipping name (ADN)	SULPHURIC ACID

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C1
ADR/RID label	8
IMDG class	8

ICAO class/division	8
ADN class	8

Transport labels

14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2P
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 SI No 716. (CHIP4).
Control of Substances Hazardous to Health Regulations (as amended). (COSHH) Refer to Revised guidance 6th Edition 2013 http://www.hse.gov.uk/pubns/priced/l5.pdf
Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. (CDG 2009)

EU legislation

EC Regulation 1907/2006 (as amended) : 'REACH'. Dangerous Substances Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

Guidance

Workplace Exposure Limits EH40. CHIP for everyone HSG228. The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved code of practice and guidance. Fifth Edition 2005. HSE Books, or download at: http://www.hse.gov.uk/pubns/priced/l5.pdf

15.2. Chemical safety assessment

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008

EU Harmonised classification.

Revision comments

Classification calculated in accordance with CLP (EC 1272/2008).

Revision date	19/02/2015
Revision	4
Supersedes date	12/02/2015

Knock Out Drain Cleaner

SDS number 10077

Risk phrases in full

R35 Causes severe burns.

Hazard statements in full

H314 Causes severe skin burns and eye damage.