Safety Data Sheet

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

1.1. Product identifier

1.1.1. Product name: SLAM PLUGHOLE UNBLOCKER BATHROOM (with hot water)

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

Plughole Unblocker with hot water

1.3. Details of the supplier of the safety data sheet

1.3.1. Company name:	KILROCK PRODUCTS LTD
1.3.2. Address:	UNIT 1B ALMA ROAD IND. EST.
1.3.3. Location/Country:	CHESHAM, BUCKS HP5 3HB.
1.3.4. Telephone, Fax:	TEL: 01494 793900 (8.00am - 5.00pm Monday to Friday) FAX: 01494 793400
1.3.5. E-mail address:	sales@kilrock.co.uk
1.3.6. Web address:	www.kilrock.co.uk

1.4. Emergency telephone number

Members of the public seeking specific information on poisons should contact the NHS National Poisons Information Service - Dial 111. Go to www.npis.org for more information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) no. 1272/2008 (CLP/ GHS)

Skin Corrosion Cat. 1, H314
Metal Corrosion Cat.1, H290

According to the classification directions of Directive no. 1999/45/EC this mixture is classified as:
C Corrosive

2.2. Label elements

Labelling according to Regulation (EC) no. 1272/2008 (CLP/ GHS):

Hazard pictograms:

Signal word: DANGER

Hazard Statements:
H314 Causes severe skin burns and eye damage.
H290 May be corrosive to metals.

Precautionary Statements:

P405	Store locked up.
P102	Keep out of reach of children.
P234	Keep only in original container.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P262	Do not get in eyes or on skin.
P305+P351+ P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P303+P361+ P353+P310	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
P301+P330+ P331+P310	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
P232	Protect from moisture.
P260	Do not breathe dust and vapours.
P501	Dispose of contents/container in accordance with all local, peripheral, national and international regulations.

Special provisions:
CONTAINS: SODIUM HYDROXIDE
PACK 1: The package must have tactive indications of danger for blind people.

Labelling according to Directive no. 1999/45/EC:

Hazard symbols:

Risk phrases:

R35	Causes severe burns

2.2.3. Safety phrases:

S1/2	Keep locked up and out of reach of children.
S8	Keep container dry.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of water.
S35	This material and its container must be disposed of in a safe way.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you fell unwell, seek medical advice immediately(show the label where possible).
S46	If swallowed, seek medical advice immediately and show this container or label.
S50	Do not mix with other cleaning products.

2.3. Other hazards

- Do not mix with other cleaning products.
- CAUTION: Reacts violently in contact with hot water and it is very likely that a quantity of the caustic solution may explode upwards. Do not leave product residues in an opened sachet.
- Follow the instructions provided in Sections 4, 7 and 8 of this S.D.S.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous substances in the mixture for health and environment according to Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1272/2008, as amended:

Substance identification	Concentration (w/w)	Classification according to 67/548/EEC and 1999/45/EC	Classification according to Reg. (EC) No 1272/2008
Caustic Soda (Sodium Hydroxide) CAS-No. 1310-73-2 / EC-No. 215-185-5 / REACH-No. 01-2119457892-27	>10%	C, Corrosive, R35	 Skin corr. Cat. 1A, H314 Met. Cor. Cat. 1, H290
Sodium Carbonate CAS-No. 497-19-8 / EC-No. 207-838-8 / REACH-No. 01-2119485498-19	>10%	Xi, Irritant, R36	 Eye Irrit. Cat. 2, H319

A detailed description of the R and H phrases is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. General recommendations
- Personal protective equipment for rescuers (see Section 8).
- In case of product splashing into the eyes and face, treat eyes first.
- Dispose of contaminated clothing in a well-ventilated area.
- Submerge soiled clothing in a basin of water.
- Strict hygiene during and at the end of working shifts.

4.1.2. Contact with skin
- Remove contaminated shoes, socks and clothing; Use emergency shower.
- Keep warm (blanket), provide clean clothing.
- Consult with a physician in all cases.

4.1.3. Contact with eyes
- Consult with an ophthalmologist immediately in all cases.
- Take to hospital immediately.
- Flush eyes as soon as possible with running water for 15 minutes, while keeping the eyelids wide open. In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).

4.1.4. Ingestion
- Consult with a physician immediately in all cases.
- Take to hospital immediately.
- If the subject is completely conscious:
  - Rinse mouth and administer fresh water.
  - Do not induce vomiting.
- If the subject is unconscious:
  - Loosen collar and tight clothing, lay the victim on his/her left side.
  - Oxygen or pulmonary resuscitation if necessary.
  - Keep warm (blanket).

4.1.5. Inhalation
- Remove the subject from the contaminated area as soon as possible; transport him/her lying down, with the head higher than the body, to a quiet, non-contaminated and well-ventilated location.
- Oxygen or pulmonary resuscitation if necessary.
- Consult with a physician in case of respiratory symptoms.

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

4.2.1. Main effects
- Corrosive to mucous membrane, eyes and skin.
- Fatalities have been observed after a single dose of 5.8 grams and more taken by adult weighing 70 kg.

4.2.2. Contact with skin
- Painful irritation, redness and swelling of the skin.
- Risk of severe burns; slow healing.
- Risk degree 4: serious consequences in all circumstances -medical assistance essential- special precautions in all cases.

4.2.3. Contact with eyes
- Severe eyes irritation, watering, redness and swelling of the eyelids.
- Burns.
- Risk of serious or permanent eye lesions.
- Risk of blindness.
- Risk degree 5: extremely grave consequences (irreversible) -immediate medical assistance essential- special precautions in all cases.

4.2.4. Ingestion
- Severe irritation, burns, perforation of the gastrointestinal tract accompanied by shock.
- Abundant salivation.
- Risk of throat oedema and suffocation.
- Nausea, vomiting (bloody), abdominal cramps and diarrhoea (bloody).
- Risk of general symptoms.
- Risk degree 5: extremely grave consequences (irreversible or death) -immediate medical assistance essential- special precautions in all cases.

4.2.5. Inhalation
- Severe irritation of the nose and throat.
- Cough and difficulty in breathing.
- At high concentrations, risk of chemical pneumonitis, pulmonary oedema.
- In case of repeated or prolonged exposure; risk of sore throat, nose bleeds, chronic bronchitis.
- Risk degree 3: serious consequences under certain conditions -medical assistance necessary- systematic general precautions and specialist according to circumstances.

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

4.3.1. Contact with skin
- Usual treatment for burns.

4.3.2. Contact with eyes
- On the advice of the ophthalmologist.

4.3.3. Ingestion
- Oxygen therapy via intra-tracheal intubation.
- If necessary, tracheotomy.
- In case of intense pain: inject an I.M. morphomimetic analgesic drug (piritramide) before taking to hospital.
- Prevention or treatment for shock.
- Urgent digestive endoscopy with aspiration of the product.
- Treatment of gastrointestinal tract burns and resulting effects.
- Prevention or treatment of esophageal stenosis.

4.3.4. Inhalation
- Pulmonary resuscitation (oxygen therapy).
- Prevention or treatment of pulmonary oedema and bacterial secondary infection.
- Rest and 48 hours medical surveillance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1. Suitable extinguishing media
- Use extinguishing media as for normal fires, such as water.

5.1.2. Unsuitable extinguishing media
- No data.

5.2. Special hazards arising from the substance or mixture
- Exothermic reaction on contact with water. Formation of flammable gas on contact with certain metals (see Section 10).

5.3. Advice for firefighters
- If safe to do so, remove the exposed containers.
- Avoid direct contact of the product with water.
- Evacuate all non-essential personnel.
- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- When intervention in close proximity wear acid resistant over suit.
- Wear self-contained breathing apparatus when in close proximity or in confined spaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
- If safe to do so, without overexposing anyone, try to stop the leak.

6.2. Environmental precautions
- Prevent discharges into the environment (sewers, rivers, soils…) .
- Immediately notify the appropriate authorities in case of important discharge.

6.3. Methods and material for containment and cleaning up
- Collect the product with suitable means avoiding dust formation.
- Do not use combustible material for the collection.
- Place everything into a closed, labelled container compatible with the product.
- Clean the area with large quantities of water.

6.4. Reference to other sections
- Follow the protective measures given in Sections 5 and 8.
- For disposal methods, refer to Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
- Keep away from reactive products (see Section 10).
- Use only equipment materials which are compatible with the product.
- Avoid any contact with water or humidity.
- Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage
- In a dry area.
- Keep in original packaging closed.
- Keep away from reactive products (see Section 10).

7.2.2. Suitable packaging material

- Packed in polyester-aluminium-polyethylene sachet.

7.2.3. Unsuitable packaging material
No data.

7.2.4. Other precautions
- Warn people about dangers of the product.
- Provide tight electrical equipment well protected against corrosion.
- Follow the protective measures given in Section 8.

7.3. Specific end use(s)
None in particular.

SECTION 8: Exposure control/personal protection

8.1. Control parameters

8.1.1. Exposure limit values
- **Sodium Hydroxide**: STEL: 2mg/m^3
  TWA: 2mg/m^3
  DNEL: 1mg/m^3, Worker, inhalation, acute local.
- **Sodium Carbonate**: SAEL (Solvay Acceptable Exposure Limit) 2007: TWA = 10 mg/m^3.

8.2. Exposure controls

8.2.1. Appropriate engineering controls
- Keep product in original packaging.
- Use in areas with good ventilation.
- Follow the protective measures given in Section 7.

8.2.2. Individual protection measures, such as personal protective equipment
- Respiratory protection: In case of dust clouds/fog/fumes, dust mask type P2.
  Self-contained breathing apparatus in medium confinement/insufficient oxygen/ in case of large uncontrolled emissions/ in all circumstances when the mask and cartridge do not give adequate protection.
  Use only respiratory protection that conforms to international/ national standards.
- Hand protection: Protective gloves- impervious chemical resistant.
  Recommended materials: PVC, neoprene, rubber (>480min.)
- Eye protection: If risk of splashing, chemical proof goggles/ face shield.
  Wear protective goggles for all industrial operations.
- Skin protection: Impervious overalls.
  Apron/ boots of PVC, neoprene in case of dusts.

8.2.3. Environmental exposure controls
- No data.

8.2.4. Other precautions
- Shower and eye wash stations.
- Wash soiled equipment.
- Consult your industrial hygienist or safety manager for the selection of personal protective equipment suitable for the working conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
- Appearance: Crystalline solid, in pearl form, very hygroscopic. White colour.
- Odour: No data.
- Odour threshold: No data.

- pH:	>13 (0,5% w/w in water)
- Melting point/freezing point:	No data.
- Initial boiling point and boiling range:	Not applicable.
- Flash point:	Not applicable.
- Evaporation rate:	Not applicable.
- Flammability (solid, gas):	Non-flammable.
- Upper/lower flammability or explosive limits:	No data.
- Vapour pressure:	Not applicable.
- Vapour density:	Not applicable.
- Relative density:	0,9 to 1,2 g/cc
- Solubility(ies):	In water 420g/l (0oC), 3470 g/l (100oC). Soluble in alcohol, glycerol.
- Partition coefficient n-octanol/water:	No data.
- Auto-ignition temperature:	No data.
- Decomposition temperature:	No data.
- Viscosity:	Not applicable.
- Explosive properties:	Non explosive. See also Section 10.
- Oxidizing properties:	Non Oxidizer.

9.2. Other information
None in particular.

SECTION 10: Stability and reactivity

10.1. Reactivity
- Reacts with moisture and water (exothermal dissolution).
- Many exothermic reactions.
- Reacts with all metals to release hydrogen.
- Corrosive action with many metals.
- Contact with strong acids may provoke violent reactions or explosions.

10.2. Chemical stability
Stable at normal storage conditions (see Section 7).

10.3. Possibility of hazardous reactions
See 10.1. Reactivity.

10.4. Conditions to avoid
- Environment exposed to moisture and water.

10.5. Incompatible materials
- Moisture and water.
- Concentrated acids.
- Metals.

10.6. Hazardous decomposition products
- Hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1. Acute toxicity:
- **Sodium Carbonate**: Acute oral toxicity: LD50, rat, 2.800 mg/kg.
  Acute inhalation toxicity: LC50, 2 h, guinea pig , 0,8 mg/l.
  Acute inhalation toxicity: LC50, 2 h, mouse , 1,2 mg/l.

Acute inhalation toxicity: LC50, 2 h, rat , 2,3 mg/l.
Acute dermal toxicity: LD50, rabbit, > 2.000 mg/kg.

11.1.2. Irritation:
- Man, irritant (skin).
- Man, irritant (eyes).

11.1.3. Corrosivity:
- Man, highly corrosive (skin).
- Man, highly corrosive (eyes).

11.1.4. Sensitization: No data.

11.1.5. Repeated dose toxicity:
- Not expected for normal handling.

11.1.6. Carcinogenisity: No data.

11.1.7. Mutagenicity:
- In vitro, no mutagenic effect.

11.1.8. Toxicity for reproduction: No data.

11.1.8. Comments: Toxic effect linked with corrosive properties.

SECTION 12: Ecological information

12.1. Toxicity
- **Sodium Carbonate**: Fish, Lepomis macrochirus, LC50, 96 h, 300 mg/l.
  Crustaceans, Ceriodaphnia dubia, EC50, 48 h, 200 - 227 mg/l.
- **Sodium Hydroxide**: Fish, 35-189 mg/l.

12.2. Persistence and degrability
- Abiotic degradation: Air, neutralization (atmospheric CO2), t1/2= 15 seconds.
  Degradation's products: sodium carbonate (aeroso l).
  Water Result: instantaneous ionization with pH increase.
  Water neutralization.
  Degradation's products: salts.
  Soil, ionization/neutralization.

12.3. Bioaccumulative potential
- Non-bioaccumulative.

12.4. Mobility
- Air Result: instantaneous degradation.
- Water Result: considerable solubility and mobility.
- Soil / sediments Result: considerable solubility and mobility.
- Soil / sediments Result: groundwater contamination if raining.

12.5. Results of PBT and vPvB assessment
- No data.

12.6. Other adverse effects
- Harmful for aquatic organisms due to alkaline pH.
- Diluted product is rapidly neutralized at environmental pH.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Dispose in compliance with local/ federal and national regulations.
- Contact waste exchanges for recycling.
- If recycling not possible, dissolve carefully in water or neutralize the product with an acid. After this treatment, the product can be discharged into the sewer.

SECTION 14: Transport information

14.1. Road and railroad transportation (ADR), air transportation (IATA), sea transportation (IMDG)

- UN number: 1823
- UN proper shipping name: Sodium hydroxide, solid, Limited quantity 23
- Transport hazard class(es): Class 8, C6
- Packing group: II
- Environmental hazards: None.
- Special precautions for user: See sections 5 to 12.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable.

SECTION 15: Regulatory information

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

- Directive 1999/45/EC as amended.
- Directive 67/548/EEC as amended.
- Regulation (EC) no. 1907/2006 as amended.
- Regulation (EC) no. 453/2010 of the Commission.
- Regulation (EC) no. 1272/2008 as amended.
- Directive 2001/59/EC.

15.2. Chemical safety assessment

No chemical safety assessment was conducted for this product.

SECTION 16: Other information

16.1. Changes in this Safety Data Sheet

Sections 1 to 16 of the previous version of this Safety Data Sheet were changed in order to conform to Regulation (EC) no. 453/2010 of the Commission.

16.2. References

- Material S.D.S.'s.

16.3. The full text of R and H phrases mentioned in Section 3

R35	Causes severe burns
R36	Irritating to eyes
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

Disclaimer: The information provided in this Safety Data Sheet (S.D.S.) is correct to the best of our knowledge, information and belief at the date of publication. The S.D.S. refers only to the specific product and do not guarantee higher quality. The user is responsible in assessing this information in comparison with the special uses he intends for the product. The user is the only responsible for the proper application of the product taking all necessary precaution measures administered by the Law. The information included in this S.D.S. is intended solely for assisting the user to fulfilling his obligations according to legislation, regarding the handling of hazardous materials. The list of included information cannot be considered complete and does not relief the user from taking all necessary precautions, other than those described in this S.D.S., regarding handling and storing the material, for which he remains the only responsible. This Safety Data Sheet replaces and cancels any previous version.