Revision Date 23/06/2017

Revision 2

Supersedes date 25/09/2008

SAFETY DATA SHEET
GP1 Alkaline Cleaner

According to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Product name	SODIUM HYDROXIDE 30% W/W
Product No.	1350
REACH Registration number	Not applicable
REACH Registration notes	Product is a mixture

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

Identified uses General chemical reagent Intermediate

Uses advised against Processes involving incompatible materials. Processes that would lead to over-exposure of the operators.

1.3. Details of the supplier of the safety data sheet

Supplier

Gateros Plating Ltd
6 Gorsey Leys
Overseal
Swadlincote
Derbyshire DE12 6JE
T: 01283763502 (08.30 - 17.00)
E: sales@gaterosplating.co.uk

1.4. Emergency telephone number

NHS Direct. Tel. 0845 4647 (24 Hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Met. Corr. 1 - H290

Human health Skin Corr. 1A - H314 Environment

Classification (1999/45/EEC) C;R35.

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

Human health

Will cause severe burns. The product will cause serious burns to eyes which can result in blindness. Ingestion will cause burns to the mouth, stomach and gastrointestinal tract. Irritation of the respiratory system. High concentrations of vapours or prolonged exposure may lead to burns of the respiratory tract. Inhalation of vapour or mist may cause lung oedema.

Environment

Due to the alkalinity of the product it may produce a local pH change in water systems which can have a damaging effect on aquatic organisms. Discharge to soil may produce a local pH change which can have a damaging effect on crops and soil dwelling organisms.

Physical and Chemical Hazards

Strongly alkaline solution. Very corrosive to skin and eyes. Will corrode metal surfaces on sustained or repeated contact. May produce an exothermic reaction with acids.

2.2. Label elements

Contains SODIUM HYDROXIDE

Label In Accordance With (EC) No. 1272/2008

Signal Word	Danger	
Hazard Statements		
	H290	May be corrosive to metals.
	H314	Causes severe skin burns and eye damage.
Precautionary Statements		
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P305+351+338	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.
	P314	Get medical advice/attention if you feel unwell.
	P501	Dispose of contents / container to hazardous waste depot.
Supplementary Precautionary Statements		
	P234	Keep only in original container.
	P260	Do not breathe vapour/spray.
	P264	Wash contaminated skin thoroughly after handling.
	P321	Specific treatment (see medical advice on this label).
	P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P363	Wash contaminated clothing before reuse.
	P390	Absorb spillage to prevent material damage.
	P405	Store locked up.
	P406	Store in corrosive resistant/… container with a resistant inner liner.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

SODIUM HYDROXIDE Not Otherwise Stated.		30-60%
CAS-No.: 1310-73-2	EC No.: 215-185-5	
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35	

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

REACH Registration number	Not applicable
REACH Registration notes	Product is a mixture

Composition Comments

An aqueous sodium hydroxide mixture and other ingredients NOS.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! First aid personnel must protect themselves with all necessary personal protective equipment during the assistance of casualties. Always consider any dangers in the vicinity before approaching to treat the casualty. Check airway for any blockages. When breathing is difficult, properly trained personnel may assist the casualty by administering oxygen. If breathing has stopped perform CPR. Place unconscious person on the side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person. If medical assistance is needed take as much detail as possible about the incident and hazardous materials involved with the casualty.

Inhalation

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. In case of severe exposure or if casualty feels unwell, obtain medical attention. Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water Get medical attention immediately!

Skin contact

Remove contaminated clothing and wash before re - use. Wash the skin with copious amounts of water. If clothing is difficult to remove or stuck to the skin then leave in place and flush affected area with water. Get medical attention immediately!

Eye contact

May cause permanent damage if eye is not immediately irrigated. Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids.If possible remove any contact lenses and continue to wash. 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 dependant of the concentration and the length of exposure.

Inhalation.

Acute: Coughing. Irritation of the respiratory system. Delayed: Can cause pulmonary edemas. Prolonged exposure to vapours or mists can cause damage to the mucous membranes of the respiratory system. Burns to the respiratory system may occur after exposure to high concentrations of vapours or mists.

Ingestion

Acute: Burns in the mouth, throat, stomach and gastrointestinal tract. Risk of perforation. Delayed: Scarring of the digestive system with possible blockages due to internal damage. Coma and death can occur following severe exposure.

Skin contact

Acute: Chemical burns. Delayed: Scarring of the skin.

Eye contact

Acute: Severe burns. Delayed: Permanent eye damage. Possible blindness.

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

Have eye wash facilities in place close to the operators' work area to provide immediate first aid prior to medical attention. All cases of exposure require immediate medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials. Small fires: Foam, carbon dioxide or dry powder. Large fires: Dry powder, foam or water spray/mist. Unsuitable extinguishing media

Do not use water jet as this can spread the fire. Do not use carbon dioxide in enclosed spaces with insufficient ventilation.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

The product is not combustible but may decompose in the event of a fire. Corrosive gases/vapours/fumes of: Sodium hydroxide. When the water component has evaporated there is a possibility that sodium oxides may be formed during fire. Unusual Fire & Explosion Hazards

Contact with metals may form hydrogen gas which is flammable and can result in explosion. Containers of flammable liquids in the area of the fire can explode upon heating. Specific hazards

Corrosive liquid. Sodium hydroxide mists or vapours will be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Prevent run-off from entering drains and watercourses. Be aware of dangers from other hazardous substances in the immediate area. Use water spray to cool unopened containers. Evacuate and keep non-emergency personnel away from the fire area until it is properly extinguished with no danger of re-ignition. Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid ingestion, inhalation of vapours and contact with skin and eyes. Have emergency procedures in place for treating spillages, evacuating the area and informing the emergency services if necessary. Restrict access to the area until the spillage is treated, if large amounts of vapours are produced that will be hazardous to others, evacuate the area. When any other effects of spillages will affect the safety of others the area should be evacuated.

6.2. Environmental precautions

Avoid unauthorised discharge to the environment. Do not discharge into drains, water courses or onto the ground. Large spillages or uncontrolled discharge to water systems must be alerted to the Environmental Agency or other regulatory body. If spillages to land cannot be treated safely or if contamination will occur the Environment Agency must be alerted immediately. If the substance has entered a foul drain or sewage system in significant quantity to cause a hazard the local Water Treatment Company must be informed. Clean up any spillages immediately, prevent material from spreading and entering drains or sewage systems.

6.3. Methods and material for containment and cleaning up

Any chemical absorbents used must be compatible with the components of the mixture. Small Spillages: Absorb with sand or other inert absorbent. Large Spillages: Dam and absorb spillages with sand, earth or other inert material. Fit drain covers where they are available if the spillage is likely to enter the drainage system. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Ventilate area and allow to dry before allowing access.

6.4. Reference to other sections

Refer to sections 8 and 13 for additional information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Avoid inhalation of vapours and spray mists. Avoid ingestion of the product. Do not eat, drink or smoke when handling. Ensure emergency procedures are in place to treat spillages and cope with other situations such as evacuation. Do not use in areas close to drainage systems unless measures are in place to prevent access of product. Wash at the end of each work shift, before eating, drinking, smoking and using the toilet. Remove contaminated clothing/footwear/equipment before entering eating areas or other places that would expose others to the substance. Do not mix with incompatible substances or mixtures. Do not dispose of the substance to the environment through unauthorised means. Do not discharge to land or water including the drainage system.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 15°C and 25°C. Store away from heat, direct sunlight and moisture. Store away from incompatible materials. It is advisable to store in a bunded area or use other protective measures such as a sump pallet or storage tray. Store in a stable situation to avoid spillages. Avoid freezing conditions. If the mixture is transferred to another container then this should be made of a compatible material. Consult with the packaging manufacturer about suitability. Do not store in containers made of aluminium or other light metals. Storage Class

Corrosive storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description

Use product under conditions described in this datasheet. Avoid exposure of operators and others who may be affected by its use. Avoid overuse of the product which would create waste and potential spillages. Always use recommended personal protective equipment. Only use the product for its intended use in a safe manner, do not use for other purposes.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
SODIUM HYDROXIDE	WEL				2 mg/m3	

WEL = Workplace Exposure Limit.

Biological Limit Values

No information available

No information has been received from the manufacturers of the substance.

DNEL

Industry	Inhalation.	Long Term	Local Effects	1 mg/m3
Consumer	Inhalation.	Long Term	Local Effects	1 mg/m3

Refers to sodium hydroxide as a substance.
No information available for PNEC of constituents.

8.2. Exposure controls

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit (WEL) is not exceeded. If vapours or mists are generated, work in a fume cupboard. Respiratory equipment

Wear suitable respiratory protection when vapours or mists are generated and there is inadequate ventilation or extraction. When the concentration of atmospheric vapours is sufficient to cause skin irritation it is advisable to wear full face respiratory protection. Use respirator fitted with cartridge suitable for inorganic vapours including the substance of concern, type B is recommended. When a particulate respirator is used it is recommended to use at least Type P2, preferably P3. Consult with the supplier as to the compatibility of the equipment with the chemical of concern. CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use air supplied system. Respiratory protection should conform to the following standards. BS EN 136: Full face masks. BS EN 140: Half-face masks. BS EN 143: Particulates. Powered air respirators should meet requirements of EN146 and EN12941. Airline fed respirators should meet the requirements of EN 270 and EN1835. Respiratory protection should be maintained in a proper condition and inspected at the frequency specified by current legislation. Hand protection

Use full length gloves. Polyvinyl chloride (PVC). Viton rubber (fluor rubber). Butyl rubber. Nitrile. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. For gloves involving total immersion 1.0mm thickness (if available) are recommended, at least 0.5mm and breakthrough time of >480 minutes. For splash resistance use minimum 0.5mm thickness and breakthrough time > 240 minutes. Gloves should have a breakthrough time sufficient for the amount of handling but allow dexterity for safe movement and handling. Gloves should conform to EN 374 (Chemical and Micro-organisms hazards). Be aware that the liquid may penetrate the gloves. Frequent change is advisable. When removing used gloves apply proper technique by avoiding skin contact with the outer surface. When packages of the product are being handled during storage or transport it is advisable to wear protective gloves to prevent damage to the skin. Eye protection

Wear approved chemical safety goggles conforming to EN 166.

Other Protection

Wear suitable protective clothing during transport, handling and storage operations connected with the product. Protective clothing should conform to the general requirements of EN 340:2003. Also consider EN 13034:2005; EN 14605:2005; EN 943:2002 dependent upon the situation resulting in exposure. Wear suitable protective footwear during handling of the product. When treating spillages it is recommended to wear protective boots, consult with the supplier as to the compatibility. Safety footwear should conform to standards EN 344 - 347. Wear plastic apron and full length gloves if handling large amounts. If there is a risk of splashing then wear a face shield. Have facilities in place to wash eyes in case of contact. If handling large amounts it is recommended to have a safety shower.

Hygiene measures

If clothing becomes contaminated with large amounts or would otherwise result in exposure to the mixture, remove and wash before re-use. Do not eat, drink or smoke in the work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Environmental Exposure Controls

See section 6 for details.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Odourless.
Solubility	Miscible with water
Relative density	1.33 @ 20°C
Bulk Density	
Not applicable.	
	Only applicable to solids.
Vapour density (air=1)	
Not determined.	
Vapour pressure	
Not determined.	
Evaporation rate	
Not determined.	
Evaporation Factor	
Not determined.	
pH-Value, Conc. Solution	14
Viscosity Not	
determined.	

Solubility Value (G/100G H2O@20°C) Not applicable.

The product is completely miscible with water.

Decomposition temperature (°C) Not determined.

Odour Threshold, Lower Not applicable.

Odour Threshold, Upper Not applicable.

Flash point, Not relevant

Auto Ignition Temperature (°C) Not relevant

Flammability Limit - Lower(%) Not relevant

The mixture is non-flammable.

Flammability Limit - Upper(%) Not relevant

The mixture is non-flammable.

Partition Coefficient (N-Octanol/Water) Not determined.

Explosive properties

The mixture itself is not explosive but can produce hydrogen gas on reaction with metals which is explosive.

Explosive under influence of flame. No

More sensitive to shock than m-dinitrobenzene. No.

More sensitive to friction than m-dinitrobenzene. No.

Solid/Liquid Ignition On Contact With Air. No.

Solid: Burning time.	Not applicable
Aerosol ignition distance	Not applicable
Aerosol flame height	Not applicable

9.2. Other information

Not available. Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Exothermic and possible violent reaction with concentrated acids and organic halogen compounds. Possible exothermic reaction with dilute acid solutions. Flammable hydrogen gas is produced on reaction with light metals. Aluminium Zinc Tin and tin oxides.

10.2. Chemical stability

Air sensitive. Will form carbonates on reaction with atmospheric carbon dioxide. Stable when stored in sealed container at normal temperatures and in a suitable location.

10.3. Possibility of hazardous reactions

Hazardous reactions as specified in section 10.1. Heat and gaseous products may be formed that would build up pressure in a sealed container, do not mix with incompatible materials. Hazardous Polymerisation Will not polymerise.

10.4. Conditions to avoid

Avoid heat, direct sunlight and moisture. Avoid contact with acids. Avoid storage in freezing conditions. Avoid storage with incompatible materials. Avoid exposure to the atmosphere, product is air sensitive. Avoid storage in an unstable manner or in a situation that would result in exposure to the product. Avoid storage near to unprotected drainage systems. It is advisable to store the product within some form of containment to prevent spillages reaching drainage systems.

10.5. Incompatible materials

Materials To Avoid

Aluminium, zinc, tin (formation of hydogen). Acids. Halogenated organic compounds Incompatible packaging materials, the mixture will attack some metals and plastics. Consult with the supplier as to suitability.

10.6. Hazardous decomposition products

None under normal conditions. See section 5 for hazardous combustion products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

The mixture has not been tested for toxicological properties. Information on toxicological properties has not been received from the manufacturer or supplier.

Acute toxicity:

Acute Toxicity (Oral LD50)

No information available.

No reliable information.

Acute Toxicity (Dermal

LD50)

No information available.

No reliable information. Acute

Toxicity (Inhalation LC50)

No information available.

No reliable information.

Skin Corrosion/Irritation:

Dose

0.5ml of 5% w/v solution 2 hr Rabbit

Primary dermal irritation index (PDI)

4.33 after 1 hour to 3.1 after 7 days.

Erythema\eschar score

2.6 at 24 hours

Oedema score

1.5 at 24 hours

Tests on rabbits for up to 8 days showed the solution to be irritating. At or above 5% w/w sodium hydroxide is classed as corrosive to skin causing severe burns. OECD Guideline 404 (Acute Dermal Irritation / Corrosion) Corrosive to skin.

With a patch test using 1%, 2% and 4% solutions, the concentration found to produce mild to moderate irritation was 2%. Solutions as low as 0.5% can produce significant irritation.
Patch test for 48 hours showed sodium hydroxide to be irritating up to 2%. Above this concentration it is considered to be corrosive.

Serious eye damage/irritation:

Below 2%w/w solutions are irritating. At or above 2% w/w they are corrosive. Tests on rabbits, OECD Guideline 405, Acute eye Irritation / Corrosion.

Respiratory or skin sensitisation:

Respiratory sensitisation

No information available.

Skin sensitisation

Patch Test: Human

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

No reliable information.

Negative.

Despite information being unreliable the results from all tests were negative for genotoxicity.

Genotoxicity - In Vivo

Chromosome aberration:

Result obtained for micronucleus assay on mouse showed negative results. Chromosome aberration on grasshoppers showed some positive results. Negative.

Information is unreliable but the majority of test results are negative.

Carcinogenicity:

Carcinogenicity

Scientifically unjustified.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

No information available.

No supplied or registered information.

Reproductive Toxicity - Development

Fetotoxicity: Dose Level: 2 microlitre doses of 0.001M NaOH Mouse

Unreliable information.

2 microlitre doses of 0.001 M sodium hydroxide produced mortality in approx. 46% of fetuses.

Specific target organ toxicity - single exposure:

STOT - Single exposure

No information available.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

No information available.

Unreliable information.

Inhalation

Irritation of the respiratory system. Coughing and difficulties in breathing. Headache. Burns to mucous membranes. May cause pulmonary edema, bronchitis or pneumonitis.

Ingestion

Chemical burns to the mouth, oesophagus and stomach. Stomach pain and vomiting. May cause severe internal injury.

Skin contact

Causes severe burns. Delayed effects may be scarring of the skin.

Eye contact

Strongly corrosive. Causes severe burns. Immediate first aid is imperative. Risk of serious damage to eyes. Lacrimation. Delayed effects can be conjunctivitis, cataracts and glaucoma. Possible blindness.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Although not classified as environmentally hazardous, harmful effects cannot be excluded in the event of improper handling or disposal. There is a possibility that the mixture could produce a local alkaline pH shift in the aquatic environment. Do not allow to enter drinking water, waste water or soil.

12.1. Toxicity

Acute Fish Toxicity

The acute effects on fish are the damaging effect on fins due the increase in alkalinity. As pH increases above 9 the mortality rate increases. Outside the range of pH6.5 to 9.0 freshwater fish suffer adverse physiological effects increasing in severity until lethality is reached. Marine life suffers outside pH 6.5 to 8.5 due to the larger buffering capacity of salt water producing a more stable pH and a reduced tolerance to pH change. Acute Toxicity - Fish

LC50 96 hours < mg/l Cyprinus carpio (Common carp) 180

This was a study on mortality. Unreliable information.

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 40.4 mg/l

Species: Ceriodaphnia sp. Immobility

Acute Toxicity - Aquatic Plants

Scientifically unjustified. Acute

Toxicity - Microorganisms

Not available.

Unreliable information.

Chronic Toxicity - Fish Early life Stage

Not available.

The registered information is unreliable. Semi-static, freshwater tests on guppies showed adverse effects on survival rate and growth. 25 to 100 mg/l produced significant changes in the biology of the fish. Short Term Toxicity - Embryo and Sac Fry Stages

Not available.

Chronic Toxicity - Aquatic Invertebrates

Scientifically unjustified.

Acute Toxicity - Terrestrial

Not available.

No supplied or registered information

Toxicity to soil:

No registered or supplied information.

Toxicity to terrestrial plants:

No registered or supplied information.

12.2. Persistence and degradability

Phototransformation

Not relevant

Stability (Hydrolysis)

Scientifically unjustified.

When dissolved in water, sodium hydroxide dissociates to form hydroxide ions. This dissociation is reduced as the pH inreases.

Biodegradation

Scientifically unjustified.

Biological Oxygen Demand

No information available.

No supplied or registered information

Chemical Oxygen Demand

No information available.

No supplied or registered information

12.3. Bioaccumulative potential

Bioaccumulative potential

Scientifically unjustified. Due to its high water solubility, sodium hydroxide is not expected to bioaccumulate. It is an inorganic compound.

Bioaccumulation factor Not relevant

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility:

Sodium hydroxide is present in the environment as sodium and hydroxyl ions. The product is miscible with water and will spread in water systems. It will be absorbed into soil with the possibility of travelling into groundwater when large or continuous discharges occur. Sodium hydroxide solutions will penetrate further into the soil as dilution increases. Some ion exchange will occur, sodium will become part of the naturally occuring sodium in the environment. There is the possibility that some hydroxide will remain in solution and travel towards groundwater.

Adsorption/Desorption Coefficient

Scientifically unjustified.

Henry's Law Constant

Not available.

No supplied or registered information

Surface tension

Not available.

No supplied or registered information

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

May create a local pH change in soil which can have a damaging effect on crops. Discharge into a foul drain can be a hazard to operators working on the system. Will affect drinking water supplies.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Any waste material is classed as hazardous waste, it should only be disposed of through licenced waste handlers and treatment sites. Do not allow unauthorised disposal to the environment. If operators are exposed to vapours during the disposal process then suitable respiratory protection should be worn. All other personal protective equipment as described in section 8 should be worn.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Avoid unauthorised disposal. Do not dump illegally onto land or into water. Uncleaned empty containers should be treated as hazardous waste. Waste material should not be disposed of directly to drain. Neutralisation is recommended before disposal, this should be carried out by a reputable waste disposal company. IF WASTE IS NEUTRALISED ON SITE BE AWARE THAT A VIGOROUS AND EXOTHERMIC REACTION MAY OCCUR. When dealing with waste always consider the waste management hierarchy of Prevention, Preparation for re-use, Recycling, Recovery and Disposal. It is advisable to minimise waste at source if possible, then re-use, recover or recycle wherever possible before considering waste disposal options.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1824
UN No. (IMDG)	1824
UN No. (ICAO)	1824

14.2. UN proper shipping name

Proper Shipping Name	SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class/Division	8

Transport Labels

14.4. Packing group

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

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

EMS	F-A, S-B
Emergency Action Code	2R
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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (CHIP 4) ECHA Guidance on the Compilation of Safety Data Sheets, September 2011. EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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. Regulation (EU) 453/2010.

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out on the mixture. Information from the manufacturer of the raw material has not been received regarding Chemical Safety Assessments, Exposure Scenarios or a Chemical Safety Report.

SECTION 16: OTHER INFORMATION

General information

Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS). This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons.

Information Sources

Raw material safety data sheets. ECHA website.

Revision Comments

Supersedes date	25/09/2008
SDS No.	10192

Risk Phrases In Full

R35	Causes severe burns.

Hazard Statements In Full

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