SAFETY DATA SHEET
BalcoNano Heavy Duty Glass Cleaner

According to Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name	BalcoNano Heavy Duty Glass Cleaner
Product No.	2807
REACH Registration number	Not applicable. Product is a mixture.

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

Identified uses	Cleaning agent.
Uses advised against	Any use other than the intended application. Processes that would lead to over-exposure of the operators.
	Processes involving incompatible materials.

1.3. Details of the supplier of the safety data sheet

Supplier

Balcony Systems Solutions Ltd
Unit 6, Systems House
Eastbourne Road, Blindley Heath
Lingfield, Surrey
RH7 6JP
T: 01342 410411
F: 01342 410412

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	Not classified.
Human health	Acute Tox. 4 - H302;Acute Tox. 4 - H312;Acute Tox. 4 - H332;Skin Irrit. 2 - H315;Eye Irrit. 2 - H319
Environment	Not classified.

Classification (1999/45/EEC) Xn;R20/21/22. Xi;R36/38.

Human health

Harmful by inhalation, in contact with skin and if swallowed. Possible irritation on skin contact, ingestion and inhalation. May cause serious damage on contact with the eyes. Damage to mucous membranes.

Environment

The product is not classed as environmentally hazardous. The product is miscible with water and can spread in water systems. Release of the product to water systems may produce a local pH change which can have a damaging effect on aquatic organisms.

Physical and Chemical Hazards

Possible exothermic reaction with strong bases. Reaction with cyanide compounds may produce hydrogen cyanide. Contact with metals can produce hydrogen and contact with sulphides can produce hydrogen sulphide. May corrode metal surfaces on prolonged or repeated contact.

2.2. Label elements

Contains HYDROFLUORIC ACID 0.63%

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

Signal Word Warning

Hazard Statements

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Precautionary Statements

P271	Use only outdoors or in a well-ventilated area.
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.
P313	Get medical advice/attention.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P501	Dispose of contents / container to hazardous waste depot.

Supplementary Precautionary Statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P322	Specific measures (see ... on this label).
P330	Rinse mouth.
P332+313	If skin irritation occurs: Get medical advice/attention.
P337	If eye irritation persists:
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

HYDROFLUORIC ACID ...% — < 1

CAS-No.: 7664-39-3 EC No.: 231-634-8

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 2 - H300	T+;R26/27/28
Acute Tox. 1 - H310	C;R35
Acute Tox. 2 - H330	

PHOSPHORIC ACID ...% — 5-10%

CAS-No.: 7664-38-2 EC No.: 231-633-2

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Corr. 1B - H314	C;R34

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

REACH Registration number Not applicable. Product is a mixture.

Composition Comments

An aqueous acidic mixture.

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! Always consider any dangers in the vicinity before approaching to treat the casualty. First aid personnel must protect themselves with all necessary personal protective equipment during the assistance of casualties. When breathing is difficult, properly trained personnel may assist the casualty by administering oxygen. 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 breathing has stopped perform CPR. Check airway for any blockages. Avoid mouth to mouth resuscitation. If medical attention is required take this information sheet with the casualty.

Inhalation

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

Ingestion

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

Skin contact

Immediately remove contaminated clothing and wash before re-use. Remove footwear if contaminated. Rinse the skin immediately with lots of water. Get medical attention immediately. Due to the hydrofluoric acid content it is advisable to apply calcium gluconate gel to the affected areas. Administer according to the manufacturers instructions.

Eye contact

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.

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

General information

The product contains hydrofluoric acid in low concentration. The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Acute: Irritation of the respiratory system. Delayed: May damage mucous membranes.

Ingestion

Acute: Nausea, vomiting. Irritation of the mouth, throat, oesophagus and gastorintestinal tract. Delayed: May produce harmful effects.

Skin contact

Acute: May cause irritation. Delayed: Prolonged exposure may cause skin conditions such as dryness or eczema.

Eye contact

Acute: Causes irritation of the eyes. Redness. Delayed: May cause damage to the eyes.

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

Cases of eye contact and ingestion should be treated immediately. Have eye wash facilities in place close to the operators' work area to provide immediate first aid prior to 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. Water spray, dry powder, carbon dioxide or alcohol resistant foam.

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

Oxides of: Phosphorus. Phosphoric and hydrofluoric acid vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

In case of fire, toxic and corrosive vapours or fumes may be formed. The plastic containers are likely to distort or melt in the heat of a fire releasing the product.

5.3. Advice for fire-fighters

Special Fire Fighting Procedures

Prevent run-off from entering drains and watercourses. 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

Have emergency procedures in place for treating spillages, evacuating the area and informing the emergency services if necessary. Spill control personnel should wear personal protective clothing and equipment as described in section 8 of this datasheet. Avoid ingestion, inhalation of vapours and contact with skin and eyes. Non-emergency personnel should be kept away from the area of spillage. When any other effects of spillages will affect the safety of others the area

6.2. Environmental precautions

Avoid unauthorised discharge to the environment. Clean up any spillages immediately, prevent material from spreading and entering drains or sewage systems. If the product has entered a foul drain or sewage system in significant amounts to cause a hazard then the local water treatment company must be informed. 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.

6.3. Methods and material for containment and cleaning up

Fit drain covers where they are available if the spillage is likely to enter the drainage system. Small Spillages: Absorb with inert absorbent material. Large Spillages: Dam and absorb spillage with sand or other inert absorbent. 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. Wash spillage site well with plenty of water. Be aware of the 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 the product. Avoid ingestion of the product, inhalation of any vapours/mists when produced and contact with skin and eyes. Do not eat, drink or smoke when handling. Do not mix with incompatible substances or mixtures. Remove contaminated clothing/footwear/equipment before entering eating areas or places that would expose others to the product. Wash at the end of each work shift, before eating, drinking, smoking and using the toilet. Do not use in areas close to drainage systems unless measures are in place to prevent access of product. Ensure emergency procedures are in place to treat spillages and cope

7.2. Conditions for safe storage, including any incompatibilities

Store away from heat, direct sunlight and moisture. Avoid freezing conditions. Store away from incompatible materials. Store in a stable situation to avoid spillages. If the mixture is transferred to another container then this should be made of a compatible material. Consult with the packaging manufacturer about suitability. When storing large amounts of the product it is advisable to use some form of containment such as a sump pallet or storage trays.

Storage Class

Corrosive storage.

7.3. Specific end use(s)

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

Usage Description

Follow manufacturer's recommendations. 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
HYDROFLUORIC ACID ...%	WEL	1.8 ppm	1.5 mg/m3	3 ppm	2.5 mg/m3	
PHOSPHORIC ACID ...%	WEL		1 mg/m3		2 mg/m3	

WEL = Workplace Exposure Limit.

DNEL	Industry	Inhalation.	Long Term	2.92 (local, phosphoric acid) mg/m3
DNEL	Consumer	Inhalation.	Long Term	0.73 (local, phosphoric acid) mg/m3
DNEL	Industry	Inhalation.	Short Term	2.5 (local and systemic, hydrofluoric acid) mg/m3
DNEL	Industry	Inhalation.	Long Term	1.5 (systemic, hydrofluoric acid) mg/m3
DNEL				
DNEL				
DNEL	Consumer	Inhalation.	Short Term	1.25 (local, hydrofluoric acid) mg/m3
DNEL	Consumer	Inhalation.	Long Term	0.2 (local, hydrofluoric acid) mg/m3
	Taken from the ECHA website: List of Registered Substances -Toxicity data. No information available for DNEL of the mixture.			
PNEC	Freshwater	0.9	mg/l	

PNEC	Marinewater	0.9	mg/l
PNEC	STP	51	mg/l
PNEC	Soil	11	mg/kg

No information available for PNEC of the mixture. No information available for PNEC of phosphoric acid. Values quoted refer to hydrofluoric acid Taken from the ECHA website: List of Registered Substances - Ecotoxicity data.

8.2. Exposure controls

Engineering measures

Provide adequate ventilation and appropriate extraction when vapours or mists are generated to ensure the occupational workplace exposure limits are not exceeded. Refer to Workplace Exposure Limits for the individual constituents.

Respiratory equipment

Wear suitable respiratory protection when vapours or mists are generated and there is inadequate ventilation or extraction. Use respirator fitted with a cartridge suitable for inorganic vapours, type B and E is recommended. When a particulate respirator is used it is recommended to use at least Type P2, preferably P3. When the concentration of atmospheric vapours is sufficient to cause skin irritation it is advisable to wear full face respiratory protection. Respiratory protection should conform to the following standards. BS EN 136: Full face masks. BS EN 140: Half-face masks. BS EN 143: Particulates. 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. 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

Wear protective gloves. Nitrile. Polyvinyl chloride (PVC). Viton rubber (fluor rubber). Consult with the supplier as to the compatibility of the glove material and intended use. Gloves showing signs of degradation should be changed to avoid skin contamination. 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 conform to EN 374 (Chemical and Micro-organisms hazards). 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. The recommended gloves have been referenced from the Marigold / Comasec compatibility guide.

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. 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. 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. Safety footwear should conform to standards EN 344 - 347. Wear rubber or plastic apron and full length gauntlets if handling large amounts. 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

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing when entering eating areas or other places that could lead to contamination of others with the product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Solubility	Miscible with water
Relative density	Approx. 1.05 20
	Calculated from the weight of components.

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	Approx. 1

pH-Value, Diluted Solution

Not determined.

The pH is dependent upon the dilution factor. A change of 1 pH unit requires a 10:1 dilution.

Viscosity

Not determined.

Solubility Value (G/100G H2O@20°C)

Not determined.

The product is completely miscible with water.

Decomposition temperature (°C)

Not determined.

Odour Threshold, Lower

Not determined.

Odour Threshold, Upper

Not determined.

Flash point (°C)

Not determined.

Auto Ignition Temperature (°C)

Not applicable.

The mixture is non-flammable.

Flammability Limit - Lower(%)

Not applicable.

The mixture is non-flammable.

Flammability Limit - Upper(%)

Not applicable.

The mixture is non-flammable.

Partition Coefficient

(N-Octanol/Water)

Not determined.

Explosive properties

Not explosive

Oxidising properties

Does not meet the criteria for oxidising.

9.2. Other information

All available information has been included in section 9.1.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactions characteristic of acids.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

May react exothermically with alkalis.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, direct sunlight and moisture. Avoid storage in freezing conditions. Avoid contact with any incompatible materials. Avoid storage near to unprotected drainage systems. Avoid handling without the recommended personal protective equipment. Avoid storage in an unstable manner or in a situation that would result in exposure to the product. 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

Alkalis Metals. Rubber and coatings.

10.6. Hazardous decomposition products

See section 5 for thermal decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

The mixture has not been tested for toxicological properties, information is provided for relevant constituent substances where available as included in section 3.2. References have been taken from the ECHA website, List of Registered Substances - Toxicological Information.

Acute Toxicity (Oral LD50) ~ 2600 mg/kg Rat

Acute toxicity test for hydrofluoric acid is scientifically unjustified. The above figure refers to phosphoric acid.

Hydrofluoric acid 2% solution reported as being corrosive at 1 and 4 hours, non-corrosive at 1 mins. 0.01% to 2% solution corrosive at 5 mins

Acute Toxicity (Inhalation LC50) 2240 ppmV (gas) Rat 1 hour

The above value refers to hydrofluoric acid in dry air. For moist air LC50 = 2340ppm. OECD Guideline 403 (Acute inhalation toxicity).

Skin corrosion/irritation - animal Data 0.5 ml 72 hr Rabbit

Primary dermal irritation index (PDI)	6.6
Erythema\eschar score	Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). 24 and 72 hours (intact and abraded). Refers to phosphoric acid 80% and 5% hydrofluoric acid.
Oedema score	Edema score (intact) at 24 hours = 2.8 and at 72 hours = 2.3. Edema score (abraded) = 3 at 24 hours and 2.2 at 72 hours. Refers to phosphoric acid. Mean erythema values between 1 hour and 14 days ranged from 1.0 to 4.0 and mean edema scores ranged from 0.3 to 1.3. Refers to 5% hydrofluoric acid.
Corrosive	

The mixture has not been tested for corrosive properties but is classified on the concentration of constituents.

Skin corrosion/irritation - Human skin model test

No information available.

Serious eye damage/irritation Skin corrosive; corrosively to eyes is assumed. No testing is needed.

Respiratory sensitisation

Not relevant

Constituents are not classed as respiratory sensitisers.

Skin sensitisation

Not relevant

Constituents are not classed as skin sensitisers.

Germ cell mutagenicity (In vitro)

Gene Mutation:

Negative.

Results of in-vitro tests showed negative results for the constituents of the mixture. OECD 471, Salmonella typhimurium.

Germ cell mutagenicity (In vivo)

No information available.

Carcinogenicity

Not relevant

The mixture is not classed as a carcinogen.

The mixture has not been tested but the constituents are not classed as carcinogens.

Reproductive Toxicity Two-generation study: Oral Mouse

No NOAEL determined, however fluoride does not impair production at 50 ppm.

Reproductive Toxicity - Development Maternal toxicity: NOAEL 200 ppm Oral Rabbit

Developmental toxicity: NOAEL = 400ppm, tests on rabbits, oral exposure.

Above results refer to sodium fluoride.

General information

Effects will be dependent upon the concentration and length of time of exposure. Higher concentrations will produce more pronounced effects.

Inhalation

Immediate: Low concentration: Mild irritation. Vapours or sprays in high concentration will irritate the respiratory system and cause coughing. Delayed effects: Vapours or mists in high concentration may cause damage to mucous membranes.

Ingestion

Immediate: Low concentration: Ingestion may cause discomfort and irritation of the mouth and oesophagus. Nausea. High concentration: Irritation of the mouth, the oesophagus and the gastrointestinal tract. May cause stomach pain or vomiting. Delayed: Harmful if swallowed.

Skin contact

Immediate: Low concentration: Mild irritation. High concentration: Prolonged or repeated contact can cause dryness and cracking of the skin, possibly leading to dermatitis or eczema

Eye contact

Immediate: Irritating to eyes. Delayed: May cause damage to the eye.

Medical Symptoms

Irritation of the eyes, respiratory system and skin. Coughing and difficulties with breathing.

Specific effects

Repeated dose toxicity: NOAEL = 250 mg/kg (phosphoric acid), oral, rat; NOAEL = 200ppm (Sodium fluoride), oral, rat; NOAEL = 1ppm (hydrofluoric acid), inhalation, rat.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Toxicity - Fish

Lepomis macrochirus (Bluegill)

96 hour, median pH 3 - 3.25. Phosphoric acid.

Various fish species gave a result of 51- 340 mg/l for the fluoride ion.

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 100 mg/l Daphnia magna

Refers to phosphoric acid. OECD Guideline 202. Static, freshwater.

EC50 48 hours Daphnia magna

Value of 97 - 153 mg/l. Refers to the fluoride ion, static, freshwater.

Acute Toxicity - Aquatic Plants

EC50 72 hours > 100 mg/l Scenedesmus subspicatus

Guideline OECD 201. Scenedesmus subspicatus is now known as Desmodesmus subspicatus. Growth rate test.

EC50 96 hours 122 mg/l Selenastrum capricornutum

Static, refers to the fluoride ion.

Acute Toxicity - Microorganisms

NOEC 3 hours 510 mg/l Activated sludge

OECD Guideline 209: Activated Sludge, Respiration Inhibition Test. Refers to the fluoride ion. Static, freshwater.

Chronic Toxicity - Fish Early life Stage

Not available.

No registered information for the constituents.

Short Term Toxicity - Embryo and Sac Fry Stages

Not available.

No registered information for the constituents.

LD50, 24 hour, 50 mg/kg for 1 day old european starling (Sturnus vulgaris) and 17 mg/kg for 16 day nestlings.

Refers to the fluoride ion, oral exposure

12.2. Persistence and degradability

Phototransformation

Scientifically unjustified.

Mixture not tested but unjustified for constituents.

Stability (Hydrolysis)

Scientifically unjustified.

Mixture not tested, unjustified for the constituents.

Biodegradation

Scientifically unjustified.

Mixture not tested, not justified for the constituents.

Biological Oxygen Demand

Not relevant

Chemical Oxygen Demand

Not relevant

12.3. Bioaccumulative potential

Bioaccumulative potential

Fluoride accumulates readily in the skeleton of fish and the exoskeleton of crustacea.

The BCF in fish was found to be 53 - 58 (d.w.) and <2 (w.w.), in crustacea it was found to be <1 (w.w.). d.w. = dry weight; w.w. = wet weight.

Partition Coefficient

Not Applicable - Inorganic chemical.

Both constituents are inorganic.

12.4. Mobility in soil

Mobility:

Adsorption and desorption are influenced by pH and the formation of aluminium and calcium complexes. The fate of inorganic fluorides also depends on the form, rate of deposition, soil chemistry and climate. Maximum adsorption to soil was reported at pH 5.5 and strongest at pH 5.5 - 6.5. Fluoride is not readily leached from soils. Phosphoric acid is adsorbed into the soil.

Adsorption/Desorption Coefficient

Not available.

No registered information.

Henry's Law Constant

Not available.

	Mixture not tested.
Surface Tension	19.5 8.6 mN/m
	Mixture not tested. Figure quoted by ECHA for an aqueous solution of HF.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Will affect drinking water supplies. May cause a local pH change in water systems which can affect aquatic organisms. May effect germination and growth rates of plants if soil contamination occurs.

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

Avoid unauthorised disposal. Do not dump illegally onto land or into water. Waste material should not be disposed of directly to drain. Uncleaned empty containers should be treated as hazardous waste. 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. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	3264
UN No. (IMDG)	3264
UN No. (ICAO)	3264

14.2. UN proper shipping name

Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, HYDROFLUORIC ACID .)

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	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

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

This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons. Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS). Toxicity and ecotoxicity data has been taken from the ECHA website of registered substances, it applies to the constituents of the mixture. This information is taken as being correct at the date of issue of this datasheet.

Information Sources

ECHA website.

Revision Comments

Changes to sections 2, 4 and 11.

Revision Date	19/01/2012
Revision	1
SDS No.	11729
Safety Data Sheet Status	Approved.

Risk Phrases In Full

R34	Causes burns.
R35	Causes severe burns.
R37	Irritating to respiratory system.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.

Hazard Statements In Full

H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H300	Fatal if swallowed.
H310	Fatal in contact with skin.