SAFETY DATA SHEET
NIPAC

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

1.1. Product identifier

Product name NIPAC

Product number HLN1

UFI UFI: N0P8-J86H-869F-7X7F

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

Identified uses Detergent. For professional use only.

Uses advised against Not for use by hand. Not for direct contact with Food or Beverage stuffs. Not for Direct Oral Consumption. Must not be used where Hypochlorite based chemicals (Bleach) are present. Must not be used in contact with Copper or its Alloys.

1.3. Details of the supplier of the safety data sheet

Supplier UK - Holchem Laboratories Ltd. Gateway House, Pilsworth Road, Bury, BL9 8RD
Tel : +44 (0) 1706 222288; e-mail info@holchem.co.uk
EU - Kersia Deutschland GmbH, Marie-Curie-Straße 23
53332 Bornheim - Sechtem

1.4. Emergency telephone number

Emergency telephone Emergency Information:-
For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 1865 407333.
Note:- This number will not accept order queries or calls dealing with equipment breakdowns.
This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number)
This product is registered with the National Poisons Information Centre (NPIC); Members of Public: +353 (01) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week); Healthcare Professionals: +353 (01) 809 2566 (24 hour service).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

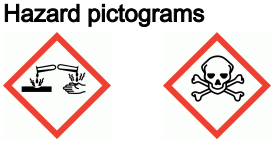
Physical hazards Met. Corr. 1 - H290

Health hazards Acute Tox. 3 - H331 Skin Corr. 1A - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



NIPAC

Signal word	Danger
Hazard statements	H290 May be corrosive to metals. H331 Toxic if inhaled. H314 Causes severe skin burns and eye damage.
Precautionary statements	P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH071 Corrosive to the respiratory tract.
Contains	NITRIC ACID ... %, PHOSPHORIC ACID
Detergent labelling	< 5% phosphates
Supplementary precautionary statements	P234 Keep only in original packaging. P363 Wash contaminated clothing before reuse. P310 Immediately call a POISON CENTER/ doctor. P404 Store in a closed container.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NITRIC ACID ... % **30-60%**

CAS number: 7697-37-2 | EC number: 231-714-2 | REACH registration number: 01-2119487297-23-XXXX

Classification
Ox. Liq. 2 - H272
Met. Corr. 1 - H290
Acute Tox. 3 - H331
Skin Corr. 1A - H314
Eye Dam. 1 - H318

PHOSPHORIC ACID **1-5%**

CAS number: 7664-38-2 | EC number: 231-633-2 | REACH registration number: 01-2119485924-24

Classification
Met. Corr. 1 - H290
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

NIPAC

Composition comments	To the best of our knowledge, all of the substances used in this product are being supported for the relevent application in REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	When it is safe to do so, remove victim immediately from source of exposure. However, consideration should be given as to whether moving the victim will cause further injury. For immediate First Aid advice in the UK, dial 111.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.
Skin contact	Remove contaminated clothing that is not stuck to the skin. Flush area with clean water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	The information given here relates to the neat chemical, dilutions may also cause chemical burns to skin and permanent eye damage.
Inhalation	Toxic if inhaled. Corrosive to the respiratory tract. If mixed with Hypochlorite based products (Bleach) Chlorine Gas may be evolved, this can result in irritation to eyes and difficulty in breathing. If inhaled this may result in irritation to the mouth, nose and respiratory tract.
Ingestion	If neat chemical is ingested, chemical burning of mouth, throat and GI tract will occur.
Skin contact	Causes severe burns.
Eye contact	Causes serious eye damage.

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

Notes for the doctor	Rinse well with water. Acidic:- If mixed with bleach will produce Chlorine Gas, check for respiratory disorders. If mixed with Copper and its alloys toxic NO(x) gas is produced.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	High volume water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards	If involved in a fire may emit toxic fumes Nitrous gases (NOx). In contact with soft metals toxic gases may be evolved. - Note comment refers to neat product. Contact with Sodium Hypochlorite liberates toxic Chlorine Gas. Toxic gases are formed when in contact with Copper and its Alloys (Brass).

5.3. Advice for firefighters

NIPAC

Protective actions during firefighting	Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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.
For non-emergency personnel	Evacuate non-essential staff and those not equipped with individual protection apparatus.
For emergency responders	Evacuate the personnel to a safe location. Keep people upwind and away from the location of the spill/flow/leak. As soon as possible, take all incompatible materials away.

6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if possible without risk. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections	See sections 8,12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. Avoid inhalation of vapours and spray/mists. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Store between -10 and +40 Degrees C. Store away from:- Chlorinated Detergents and Disinfectants.

7.3. Specific end use(s)

Specific end use(s)	Acidic Detergent, Descaler. Refer to Product Information Sheet for use instructions.
Usage description	This product is suitable for use in food and beverage processing plants, but it is not designed for direct food contact.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

NITRIC ACID ... %

Short-term exposure limit (15-minute): WEL 1 ppm 2.6 mg/m³

PHOSPHORIC ACID

NIPAC

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³
Short-term exposure limit (15-minute): WEL 2 mg/m³
WEL = Workplace Exposure Limit.

Ingredient comments

As a requirement of REACH we have considered all of the components of this formulation. We believe that Nitric Acid is the most hazardous component of this formulation. Nitric Acid is not expected to be systemically available to the body under normal handling and use conditions, therefore systemic effects after Dermal exposure are not expected. Based on data from our suppliers, we believe that if the risk management measures outlined in section 8.2 are followed users will comply with the requirements of REACH for the expected use of this product. Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.
The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.
If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.
The WEL limits are laid down in the EH40 list as supplied by the HSE. Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

NITRIC ACID ... % (CAS: 7697-37-2)

DNEL

Workers - Inhalation; Long term local effects: 2.6 mg/m³
Workers - Inhalation; Acute local effects: 2.6 mg/m³
Consumer - Inhalation; Long term local effects: 1.3 mg/m³
Consumer - Inhalation; Acute local effects: 1.3 mg/m³

PHOSPHORIC ACID (CAS: 7664-38-2)

DNEL

Workers - Inhalation; Long term local effects: 1 mg/m³
Workers - Inhalation; Short term local effects: 2 mg/m³
Workers - Inhalation; Long term systemic effects: 10.7 mg/m³
Consumer - Oral; Long term systemic effects: 0.1 mg/kg/day
Consumer - Inhalation; Long term local effects: 0.36 mg/m³
Consumer - Inhalation; Long term local effects: 4.57 mg/m³

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

If use of this product generates dust, mists, vapours or fumes, process enclosures or local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits quoted in this msds or other data sources.

NIPAC

Personal protection	The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.
Eye/face protection	The following protection should be worn: Full face visor or shield. Refer to EN Standard 166 to select appropriate level of protection.
Hand protection	Rubber (natural, latex). Butyl rubber. Viton rubber (fluoro rubber). Chloroprene rubber. Polyvinyl chloride (PVC). Break through time of >480mins is recommended. 0.5mm Thickness is recommended. Refer to Standard EN 374 and EN 16523
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.
Hygiene measures	Provide eyewash station and safety shower. Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Contaminated clothing and shoes must be discarded.
Respiratory protection	In case of brief exposure or low pollution use breathing filter apparatus. Respiratory protection complying with EN 141. Recommended Filter type:E Combination filter:B-P2 In case of intensive or longer exposure use self-contained breathing apparatus.
Environmental exposure controls	Do not allow the substance to contaminate surface water/ground water. See points 6, 12 &13. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be adopted. Users of this product should consult local drainage and permitting authorities to ensure that any restrictions or discharge consents are adhered to.
General Health and Safety Measures.	In use solutions are likely to have extreme pH values and should be considered to be classified as H314. This should be considered when selecting control measures and PPE. We recommend use of gloves and eye protection for normal use of this product. A full Risk Assessment should be carried out before handling any chemical(s). Risk Assessments should refer to COSHH, and any other relevant legislation or industry specific guidelines governing the use of chemicals.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless to pale yellow.
Odour	Pungent. Acidic.
Odour threshold	Not available.
pH	pH (concentrated solution): 0 - 1 pH (diluted solution): 1 - 2 @ 1%
Melting point	<0 Degrees C
Initial boiling point and range	Not applicable.
Flash point	Not applicable. Contains no Flammable Components
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.

NIPAC

Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.27 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable. Technically not feasible.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable. Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	Not applicable.
Explosive Properties	Not Classified as Explosive
Storage Temperature Range	-10 to +40 degrees C

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. Stable under normal temperature conditions and recommended use. Avoid contact with caustic/alkaline material; this will generate heat and potentially corrosive vapour. Avoid contact with bleach and other hypochlorite based products; this will produce toxic Chlorine gas. Reaction with Copper and its Alloys will produce a noxious green (NOx) gas.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. - See note 10.6.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Refer to section 10.1. Do not mix with Hypochlorite based chemicals, this will result in the generation of toxic chlorine gas.

10.4. Conditions to avoid

NIPAC

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Avoid contact with reducing agents Contact with Hypochlorite based products will liberate Toxic Chlorine Gas. Reaction with Copper and Brass can produce toxic green NOx gases.

10.6. Hazardous decomposition products

Hazardous decomposition products Will evolve Hydrogen Gas when in contact with soft metals such as Aluminium. Toxic gases/vapours/fumes of: Oxides of the following substances: Nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 12,345.68

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 6.4

Skin sensitisation

Skin sensitisation No evidence of skin sensitisation for any component of this formulation.

Carcinogenicity

Carcinogenicity The components of this formulation will not be systemically available in the body under normal conditions of handling. As a consequence it is not expected to cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility The components of this formulation will not be systemically available in the body under normal conditions of use and handling. As a consequence it is not expected to be toxic to the reproductive system or developing foetus.

General information See section 4.2.

Inhalation Toxic by inhalation. Corrosive to the respiratory tract.

Ingestion May cause chemical burns in mouth, oesophagus and stomach.

Skin contact Corrosive. Causes severe burns.

Eye contact Risk of serious damage to eyes. May cause permanent eye injury. - See section 4.2.

Toxicological information on ingredients.

NITRIC ACID ... %

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 2.65

PHOSPHORIC ACID

Acute toxicity - oral

Notes (oral LD_{50}) 300-2000 mg/kg, Oral, Rat.

ATE oral (mg/kg) 500.0

SECTION 12: Ecological information

NIPAC

Ecotoxicity This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish It is advisable to check discharge permits for Phosphate limitations.
See note 12.0.

Ecological information on ingredients.

NITRIC ACID ... %

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96hr: 12.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48hr: 4.6 mg/l, Ceriodaphnia dubia (Water Flea)
Acute toxicity - microorganisms	EC_{0}, : 794 mg/l,

PHOSPHORIC ACID

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates	EC_{50}, 48hr: 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72hr: 100 mg/l, Desmodesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, 3hr: 1000 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability This product consists solely of inorganic materials for which biodegradation assessment is not applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not applicable. Technically not feasible.

12.4. Mobility in soil

Mobility The product contains substances which are water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

NIPAC

General information	When handling waste, the safety precautions applying to handling of the product should be considered. Do not mix with other chemicals. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

14.1. UN number

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

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS NITRIC ACID ...%, PHOSPHORIC ACID)
Proper shipping name (IMDG)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS NITRIC ACID ...%, PHOSPHORIC ACID)
Proper shipping name (ICAO)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS NITRIC ACID ...%, PHOSPHORIC ACID)
Proper shipping name (ADN)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS NITRIC ACID ...%, PHOSPHORIC 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

NIPAC

IMDG Code segregation group	1. Acids
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

National regulations	UK Adoption and Implementation of the UN Globally Harmonised System (GHS) on Classification and Labelling of Chemicals (GB CLP) and considers UK National REACH legislation.
EU legislation	European Regulation (EC) No 1272/2008 (as amended) on Classification, Labelling and Packaging of Substances and Mixtures. Also considered is the REACH Regulation (EC) No.1907/2006 (as amended).
Explosive Precursors	Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors: Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	(EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures. NPIS - National Poisons Information Service. PBT - Persistent, Bioaccumulative & Toxic. vPvB - Very Persistent, Very bioaccumulative. REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006). DNEL - Derived No Effect Limit. PNEC - Predicted No Effect Concentration. COSHH - Control of Substances Hazardous to Health. Industry - Refers in section 8 to application of the substance in an industrial process. Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.

NIPAC

General information	This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. Only trained personnel should use this material. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.
Revision comments	Addition of H331 Toxic if inhaled to Section 2, based on updated supplier information. No change to the formulation. Addition of respirator to PPE in Section 8 and change to the recommended hand PPE in Section 8. Addition of Unique Formula Identifier Code (UFI)
Revision date	18/02/2022
Hazard statements in full	H272 May intensify fire; oxidiser. H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H331 Toxic if inhaled.
REACH extended MSDS comments	REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevent recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevent information is incorporated into the safety data sheet.
END OF SAFETY DATA SHEET	