

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

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

#### 1.1. Product identifier

Product name NIPAC B

Product number HLN2

# 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 Holchem Laboratories Limited

Gateway House, Pilsworth Road,

Pilsworth Industrial Estate, Bury, Lancashire (UK)

BL9 8RD

+44 (0) 1706 222288 +44 (0) 1706 221550 info@holchem.co.uk

#### 1.4. Emergency telephone number

**Emergency telephone** Out of Office Hours 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) 7050 265597.

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.

# SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification

Physical hazards Met. Corr. 1 - H290

Health hazards Skin Corr. 1A - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

## **NIPAC B**

#### **Pictogram**



Signal word Danger

Hazard statements H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**Precautionary statements** P234 Keep only in original container.

P280 Wear protective clothing, gloves, eye and face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 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.

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

Contains NITRIC ACID

**Detergent labelling** < 5% phosphates

Supplementary precautionary

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

statements

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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%

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

Ox. Liq. 3 - H272 O; R8. C; R35

Met. Corr. 1 - H290 Skin Corr. 1A - H314

PHOSPHORIC ACID 1-5%

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

2119485924-24

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

Met. Corr. 1 - H290 C;R34.

Skin Corr. 1B - H314

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

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

#### **NIPAC B**

**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.

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 Inhalation of neat product is unlikely. However, inhalation of mists or vapours of diluted

product may result in soreness, irritation or burns to the mouth, nose and 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** Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical

burning of mouth, throat and GI tract will occur. Similar but less severe symptoms will be seen

if dilute chemical is ingested.

**Skin contact** Causes severe burns.

Eye contact Extreme pain and blurred vision. May result in permanent eye damage.

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

Notes for the doctor Rinse well with water to neutral pH. If mixed with Copper and its alloys toxic NO(x) gas is

produced. If mixed with bleach will produce Chlorine Gas, check for respiratory disorders.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

## 5.2. Special hazards arising from the substance or mixture

Specific hazards This product is non combustible, on heating corrosive vapours may be formed. In contact with

some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. 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

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

#### **NIPAC B**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

#### 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 Wear suitable protective equipment for prolonged exposure and/or high concentrations of

vapours, spray or mist. Read and follow manufacturer's recommendations.

#### 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): 1 ppm 2.6 mg/m3

## PHOSPHORIC ACID

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

#### **NIPAC B**

#### 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. This is taken from the Chemical Agents Directive (98/24/EC). 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** 

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

PHOSPHORIC ACID (CAS: 7664-38-2)

**DNEL** - Inhalation; Long term local effects: 2.92 mg/m<sup>3</sup>

#### 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.

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). Neoprene. Polyvinyl chloride (PVC). Refer to Standard EN 374.

#### NIPAC B

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 No specific recommendations. Respiratory protection must be used if the airborne

contamination exceeds the recommended occupational exposure limit.

**Environmental exposure** 

General Health and Safety

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.

Measures.

The above classification relates to the neat product. At 5% this product would be classified as H315 (Skin Irrit 2) and H318 (Eye Damage 1). A risk assessment should be performed, but we recommend use of gloves and eye/face protection.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. Note mixing use solutions with Sodium Hypochlorite based products such as Bleach will produce toxic chlorine gas.

# **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

pΗ 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.

Upper/lower flammability or

explosive limits

Not applicable.

Not available.

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.

#### **NIPAC B**

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

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 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

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

**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

Toxic gases/vapours/fumes of: Oxides of the following substances: Nitrogen.

products

#### SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

#### **NIPAC B**

Respiratory sensitisation

Respiratory sensitisation 
No evidence of respiratory sensitisation for any component of this formulation.

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 Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat,

mouth and nose.

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

Skin contact Causes burns.

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

#### SECTION 12: Ecological Information

**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 toxicity - fish This mixture is not classified as toxic to aquatic organisms.

It is advisable to check discharge permits for Phosphate limitations.

# 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

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

assessment

## 12.6. Other adverse effects

Other adverse effects Not determined.

#### **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **NIPAC B**

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

14.2. UN proper shipping name

Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID ...%, PHOSPHORIC

(ADR/RID) ACID)

Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID ...%, PHOSPHORIC

(IMDG) ACID)

Proper shipping name (ICAO) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID ...%, PHOSPHORIC

ACID)

Proper shipping name (ADN) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID ...%, PHOSPHORIC

ACID)

#### 14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID label 8

IMDG class 8

ICAO class/division 8

# Transport labels



# 14.4. Packing group

ADR/RID packing group II

IMDG packing group

ICAO packing group

#### 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 Identification Number 80

(ADR/RID)

#### **NIPAC B**

Tunnel restriction code (E)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

#### SECTION 15: Regulatory information

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

EU legislation European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of

Substances and Mixtures.

This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC)

No.1907/2006.

#### 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.

**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 MSDS modified to show WEL data in section 8

Revision date 18/09/2015

**Risk phrases in full** R34 Causes burns.

R35 Causes severe burns.

R8 Contact with combustible material may cause fire.

**Hazard statements in full** H270 May cause or intensify fire; oxidiser.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

## **NIPAC B**

# 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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. All composition information is based on suppliers data.