


## 1. Identification

Product identifier	Industos Plus	
Recommended use of the chemical and restrictions on use	A strong chlorinated detergent. For use as a foaming bleach sanitiser, with a eucalyptus fragrance, designed for the cleaning and sanitising of hard surfaces. This product may be used in kitchens, bathrooms and toilets as well as in food preparation areas.	
Details of manufacturer or importer	Company Name	Chemwell Pty Ltd ABN 94 155 544 040
	Address	3 Clive St, Springvale, VIC, 3171
	Phone	03 9558 5678
	Email	<a href="mailto:chemwell@chemwell.com.au">chemwell@chemwell.com.au</a>
	Website	<a href="http://www.chemwell.com.au">www.chemwell.com.au</a>
Emergency phone number	Police, Fire & Ambulance	000
	Poisons Information Centre	13 11 26

## 2. Hazard(s) Identification

This material is hazardous according to criteria of Safe Work Australia.

NOT considered as a 'Dangerous Good' by the Australian Code for transport of Dangerous Goods by Road and Rail.

Classification of the hazardous chemical	Acute Aquatic Toxicity 2 Corrosive to metals 1 Eye Damage/Irritation 1 Skin Corrosion/Irritation 2
Hazard symbols	
Signal word(s)	Danger
Hazard statement(s)	H290 - May be corrosive to metals H315 - Causes skin irritation H318 - Causes serious eye damage H401 - Toxic to aquatic life

Precautionary statement(s)	Prevention	P234 - Keep only in original container. P264 - Wash thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P273 - Avoid release to the environment.
	Response	P302+352 - IF ON SKIN: Wash with plenty of water. P321 - Specific treatment (see ... on this label). P332+313 - If skin irritation occurs: Get medical advice/attention. P362 - Take off contaminated clothing. 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.
	Storage	P406 - Store in a corrosive resistant container with a resistant inner liner.
	Disposal	P501 - Dispose of contents/container to in accordance with local regulation.

### 3. Composition and Information on Ingredients

Name	Proportion
Sodium Hydroxide	<10%
Amine Oxide	<10%
Eucalyptus Oil	<10%
Sodium Hypochlorite	<10%

Disclosure of ingredient names is not required by the WHS Regulations for those ingredients that meet only physicochemical and/or environmental hazard classifications, or for nonhazardous ingredients.

There is no requirement to disclose the identity of ingredients for the following GHS health hazard categories because they fall outside the scope of the WHS Regulations:

- Acute toxicity – Category 5 (oral, dermal and inhalation)
- Skin; corrosion / irritation – Category 3
- Serious eye damage / eye irritation – Category 2B
- Aspiration hazard – Category 2
- Aquatic toxicity (all categories)
- Flammable gas – Category 2
- Ozone depletion.

#### 4. First Aid Measures

Swallowed	Immediately rinse mouth out thoroughly with water and give water to drink. DO NOT induce vomiting. Seek medical advice.
Eye	Immediately irrigate eyes with large amounts of water for at least 15 minutes with eyelids held open. Take care not to rinse contaminated water into the non-affected eye. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. Seek medical advice.
Skin	Immediately wash affected area with large amounts of water. Remove any contaminated clothing and wash before re-use. Seek medical advice if pain or irritation persists.
Inhaled	For all but minor symptoms seek medical advice. Not considered a normal feature of use.
First Aid Facilities	Standard first aid facilities.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.

#### 5. Fire Fighting Measures

Suitable extinguishing equipment	Use water spray, alcohol-resistant foam, dry agent (carbon dioxide, dry chemical powder).
Specific hazards arising from the chemical	<p>During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Hazardous products of combustion for each ingredient are:</p> <p>Sodium Hydroxide: Reacts with aluminium, tin, zinc and their alloys, copper, lead, etc. giving off hydrogen.</p> <p>Amine Oxide: Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</p> <p>Eucalyptus Oil: May produce toxic fumes of carbon monoxide and/or carbon dioxide and hydrocarbons if burning.</p> <p>Sodium Hypochlorite: Under fire conditions this product may emit toxic and/or irritating vapours and gases including chlorine gas and hydrogen chloride gas.</p>
Special protective equipment and precautions for fire fighters	<p>Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant section.</p> <p>Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.</p> <p>HazChem (EAC): 2X</p>

## 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	<p>Personnel involved in the clean-up should wear protective clothing as listed in section 8. Use clean, non-sparking tools and equipment. Avoid breathing vapours and contact with skin and eyes. Remove contaminated clothing and wash before reuse.</p> <p>Eliminate all sources of ignition. Increase ventilation.</p> <p>Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. Clean up all spills immediately. Clear area of all unnecessary personnel.</p>
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
Methods and materials for containment and cleaning up	<p>Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. This may involve tipping container on its side. Clean up all spills immediately. Clear area of all unnecessary personnel. If safe to do so repack leaking container into new container.</p> <p>Place inert, absorbent, non-combustible material onto spillage. Wipe up. Place in a suitable, labelled container for waste disposal.</p>

## 7. Handling and Storage

Handling	<p>Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Check Section 8 for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the counteracting workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.</p>
Storage	<p>Store in a cool, well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Containers should be protected against any form of physical damage indeterminate goodness wellbeing always. Have appropriate fire extinguishers available in and near storage area. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10.</p>

## 8. Exposure Controls and Personal Protection

Exposure standards	<p>No value assigned for this specific material by Safe Work Australia. However, Exposure Standard(s) for ingredient(s) are:</p> <p>Sodium Hydroxide: No Data Available</p>
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	<p>Amine Oxide: Not Available.</p> <p>Eucalyptus Oil: No Data Available</p> <p>Sodium Hypochlorite: Chlorine: Peak Limitation = 3 mg/m<sup>3</sup> (1 ppm) Sodium hydroxide: Peak Limitation = 2 mg/m<sup>3</sup></p>
Biological limits	<p>Biological limits for ingredient(s) are:</p> <p>Sodium Hydroxide: No information available on biological limit values for this product.</p> <p>Amine Oxide: None specified.</p> <p>Eucalyptus Oil: No information available on biological limit values for this product.</p> <p>Sodium Hypochlorite: None specified.</p>
Engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>
Personal protective equipment (PPE)	<p>Safety glasses with side shields.</p> <p>Chemical protective gloves.</p>

## 9. Physical and Chemical Properties

Appearance (physical state, colour etc.)	Clear liquid
Odour	Eucalyptus fragrance
Odour threshold	Not specified
pH	12-12.5
Melting point/freezing point	Not specified

Initial boiling point and boiling range	Not specified
Flash point	Not flammable
Evaporation rate	Not specified
Flammability (solid, gas)	Not specified
Upper/lower flammability or explosive limits	Not specified
Rejonasus Factor	Not specified
Vapour pressure	Not specified
Vapour density	Not specified
Relative density	Not specified
Solubility	Soluble in water
Partition coefficient: n-octanol/water	Not specified
Auto-ignition temperature	Not specified
Decomposition temperature	Not specified
Viscosity	Not specified

## 10. Stability and Reactivity

Reactivity	Reacts exothermically with acids.
Chemical stability	Stable under normal ambient storage and handling conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid	No data available.
Incompatible materials	No data available.
Hazardous decomposition products	See section 5.

## 11. Toxicological Information

Acute Toxicity, Dermal	Not Applicable
Acute Toxicity, Dusts And Mists	Not Applicable
Acute Toxicity, Gases	Not Applicable
Acute Toxicity, Inhalation	Not Applicable
Acute Toxicity, Oral	Not Applicable
Acute Toxicity, Vapours	Not Applicable
Skin Corrosion/Irritation	Category 2
Eye Damage/Irritation	Category 1
Respiratory Sensitization	Not Applicable

Skin Sensitization	Not Applicable
Germ Cell Mutagens	Not Applicable
Carcinogenicity	Not Applicable
Reproductive Toxicity	Not Applicable
Specific Target Organ Toxicity RE	Not Applicable
Specific Target Organ Toxicity SE	Not Applicable
Aspiration Hazard	Not Applicable

### **Toxicological Information for Sodium Hydroxide**

#### **General Information:**

##### Animal Toxicity

Oral LDLO Rabbit: 500 mg/kg

Skin, Rabbit, Adult, 500 mg/24h Severe irritation

Eye, Rabbit, Adult 50mg/24h Severe irritation

Intra peritoneal, Mouse, LD50 40mg/kg

Specific target organ toxicity - repeated exposure: Corrosive substance. In addition, the substance is not expected to be systemically available in the body under normal handling and use conditions and therefore systemic effects of the substance after repeated exposure are not expected to occur.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction);

**Carcinogenicity:** The substance did not induce mutagenicity in in vitro and in vivo studies (EU RAR, 2007). Systemic carcinogenicity is not expected to occur because the substance is not expected to be systemically available in the body under normal handling and use conditions.

**Germ cell mutagenicity:** Both the in vitro and the in vivo genetic toxicity tests indicated no evidence of mutagenic activity. Furthermore the substance is not expected to be systemically available in the body under normal handling and use conditions and for this reason additional testing is considered unnecessary (EU RAR, 2007).

**Reproductive toxicity:** The substance is not expected to be systemically available in the body under normal handling and use conditions and for this reason it can be stated that the substance will not reach the foetus nor reach male and female reproductive organs.

**Reproductive toxicity, effects on or via lactation;** The substance is not expected to be systemically available in the body under normal handling and use conditions and for this reason additional testing is considered unnecessary.

**Eye Irritant:** Causes severe burns. Can cause ulceration of the conjunctiva and cornea.

**Ingestion:** Causes severe burns. Burns to the mouth, esophagus, can cause intestinal perforation.

**Inhalation:** Causes severe burns. Irritation of the respiratory system.

**Skin Irritant:** Causes severe burns. Intense burning and ulcers penetrating the skin.

**Carcinogen Category:** 0

### **Toxicological Information for Amine Oxide**

**Inhaled** The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

**Ingestion** Accidental ingestion of the material may be damaging to the health of the individual. Nonionic surfactants may produce localised irritation of the oral or gastrointestinal lining and induce vomiting and mild diarrhoea.

**Skin Contact** The material may accentuate any pre-existing dermatitis condition. Open cuts, abraded or irritated skin should not be exposed to this material. The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

**Eye** If applied to the eyes, this material causes severe eye damage. Non-ionic surfactants can cause numbing of the cornea, which masks discomfort normally caused by other agents and leads to corneal injury. Irritation varies depending on the duration of contact, the nature and concentration of the surfactant.

**Chronic** Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Prolonged or repeated skin contact may cause degreasing with drying, cracking and dermatitis following.

**Toxicity** Oral (rat) LD50: >1500 mg/kg

**Irritation** Nil Reported. [Albright]

Amine oxides are readily metabolised and excreted after oral intake. They produced no mortality or skin sensitization on exposure but caused reversible irritation of the eyes, skin and airways. They may also cause cataracts. Repeat dosing showed no abnormal changes except for diarrhoea and weight loss.

### **Toxicological Information for Eucalyptus Oil**

#### **General Information**

Measures of toxicity

Acute oral toxicity: Oral LD50 rat: 2480 mg/Kg

Skin corrosion/irritation: Dermal LD50 rabbit: >5000 mg/Kg

Eye damage/irritation: HET-CAM Severe irritant

Dermal Toxic Dose : Feline: 5-7 mL/Kg

Dermal Toxic Dose: Canine: 1500mg/kg

Dermal Toxic Dose: Human adult: > 25% (in white paraffin applied for 21 days) ?

Oral Toxic Dose: Human adult: 375 mg/kg

Oral Toxic Dose (1): Human child: 218 mg/Kg (NIOSH1975)

Toxic effects :

Rat: Somnolence, muscle weakness, ataxia, partial paralysis

Feline: Ataxia, change to leukocyte count

Canine: Somnolence, ataxia, partial paralysis

Human adult: Hallucination, distorted perception, coma, diarrhoea, allergic dermatitis

Human child: Hallucination, distorted perception, sleep, ataxia, coma, somnolence, diarrhoea

#### **Eye Irritant**

Severe irritant. May cause redness, irritation or oedema.

#### **Ingestion**



Harmful : may cause lung damage if swallowed. Harmful if ingested in quantity, causing internal irritation, nausea and vomiting, dizziness and muscular weakness, rapid pulse and difficulty in breathing. In severe cases delirium and convulsions may occur.

**Inhalation**

Potential irritant. Over-exposure at high levels may result in mucous membrane irritation of the nose and throat with coughing.

**Skin Irritant**

Potential irritant. May cause erythema, irritation or oedema if oil is oxidised.

Repeated or prolonged skin contact may lead to allergic contact dermatitis.

**Sensitisation**

Sensitisation potential :

Skin: Low (modified FCA method, guinea pig model); LLNA

Eye: Category 2 for reversible eye effects

**Carcinogen Category**

No Data Available

**Toxicological Information for Sodium Hypochlorite**

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:**

Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

**Eye contact:**

A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

**Skin contact:**

Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

**Inhalation:**

Breathing in mists or aerosols may produce respiratory irritation. Delayed (up to 48 hours) fluid build-up in the lungs may occur.

**Acute toxicity:** No LD50 data available for the product. For the constituent SODIUM HYPOCHLORITE: Oral LD50 (mice): 5800 mg/kg

**Serious eye damage/irritation:**

Moderate irritant (rabbit). Standard Draize test

**Chronic effects:** No information available for the product.

## 12. Ecological Information

Acute Aquatic Toxicity	Category 2
Chronic Aquatic Toxicity	Not Applicable

### Ecological Information for Water

None specified.

### Ecological Information for Sodium Hydroxide

**Ecotoxicity** The hazard of the substance for the environment is caused by the hydroxyl ion (pH effect). For this reason the effect of the substance on the organisms depends on the buffer capacity of the aquatic or terrestrial ecosystem. The high water solubility and low vapour pressure indicate that the substance will be found predominantly in water. Also the variation in acute toxicity for aquatic organisms can be explained for a significant extent by the variation in buffer capacity of the test medium. LC50 values ranged between 33 and 189 mg/l.

Acute toxicity to fish: LC50 (lethal concentration, 50%): All available tests resulted in a range of toxicity values between 35 to 189 mg/l. However, in the majority of these test reports there were no data on pH variation.

Chronic toxicity to fish: NOEC (no observed effect concentration): It is not required to conduct this study since the substance dissociates in water and the only possible effect would result from the pH effect. However, pH will remain within environmentally expected ranges.

Acute toxicity to crustaceans: EC50 (effect concentration, 50%): Species: Ceriodaphnia. 40.4 mg/l (48 h; based on immobility). (Warne et al., 1999)

Chronic toxicity to crustaceans: NOEC (no observed effect concentration): it is not required to conduct this study since the substance dissociates in water and the only possible effect would result from the pH effect. However, pH will remain within environmentally expected ranges.

Toxicity data on soil micro- and macro-organisms and other environmentally relevant organisms, such as birds, bees and plants: If emitted to soil, sorption to soil particles will be negligible. Depending on the buffer capacity of the soil, OH<sup>-</sup> will be neutralised in the soil pore water or the pH may increase. There is no direct exposure of soil to NaOH based on the available uses. In addition, no indirect exposure via air is expected as it rapidly neutralizes in air.

**Persistence/Degradability** Readily biodegradable Other relevant information Abiotic degradation: NaOH is a strong alkaline substance that dissociates completely in water to Na<sup>+</sup> and OH<sup>-</sup>. High water solubility and low vapour pressure indicate that NaOH will be found predominantly in aquatic environment. This implies that it will not adsorb on particulate matter or surfaces. Atmospheric emissions as aerosols are rapidly neutralized by carbon dioxide and the salts will be washed out by rain.

**Mobility** High water solubility and mobility.

**Environmental Fate** Caustic soda may react violently with acids and water. Do not allow drainage into sewers, streams or storm conduits.

**Bioaccumulation Potential** Bioconcentration factor (BCF): experimental data: Considering its high water solubility, NaOH is not expected to bioconcentrate in organisms. In addition, sodium is a naturally-occurring element that is prevalent in the environment and to which organisms are exposed regularly, for which they have some capacity to regulate the concentration in

the organism. Partition coefficient: n-octanol/water (log Pow): Not applicable (inorganic substance).

**Environmental Impact** No Data Available

### Ecological Information for Amine Oxide

**Toxicity**

Very toxic to aquatic organisms. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

**Persistence and degradability** Not Available

**Bioaccumulative potential** Not Available

**Mobility in soil** Not Available

**Ecological Information for Eucalyptus Oil**

**Ecotoxicity** Not acutely toxic to fish LC50 > 100 mg/L (OECD 203)

**Persistence/Degradability** This product is readily biodegradable.

**Mobility** No information available on mobility for this product. Practically insoluble.

**Environmental Fate** May cause adverse side effects in an aquatic environment, biodegradable in seawater

**Bioaccumulation Potential** No information available on bioaccumulation for this product.

**Environmental Impact** No Data Available

**Ecological Information for Sodium Hypochlorite**

**Ecotoxicity** Avoid contaminating waterways.

For SODIUM HYPOCHLORITE:

**Persistence/degradability:** This material is biodegradable.

**Aquatic toxicity:** Very toxic to aquatic organisms.

48hr LC50 (fish): 0.07 - 5.9 mg/L.

**13. Disposal considerations**

Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

**14. Transport Information**

Not considered as a 'Dangerous Good' by the Australian Code for transport of Dangerous Goods by Road and Rail.

UN Number	Not applicable
Proper shipping name or Technical Name	Corrosive liquids, n.o.s.
Transport hazard class	
Packing Group	
Environmental hazards for Transport Purposes	Classified as having an acute aquatic toxicity.
UFAC Code	TANZ 15FF6
Special Precautions for user	None specified

Additional Information	None specified
Hazchem or Emergency Action Code	2X

## 15. Regulatory Information

No information in this section.

## 16. Other information

Date of Preparation:

12 February 2022

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