

**NYALIC HBI-101****Hazard Alert Code:  
MODERATE**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

**Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** NYALIC HBI-101**PRODUCT USE**

Apply by brush, hand roller or spray atomisation. May also be applied by dipping. Anti corrosion coating for ferrous and nonferrous metals, anodised, fibreglass and painted surfaces.

**SUPPLIER**

Company: Nyalic Nz Ltd

Address:

39 Totara Street

Dunedin






New Zealand,

NZL

Telephone: (+64) 03 4710 424

Emergency Tel: (+64) 03 4710 424

**HAZARD RATINGS**

	Min	Max
Flammability:	1	
Toxicity:	2	
Body Contact:	2	
Reactivity:	0	
Chronic:	2	

Min/Nil=0  
Low=1  
Moderate=2  
High=3  
Extreme=4

**Section 2 - HAZARDS IDENTIFICATION****STATEMENT OF HAZARDOUS NATURE****HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.****POISONS SCHEDULE**

S5, NZ S4

**RISK**

Irritating to eyes and skin.

Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

HARMFUL - May cause lung damage if swallowed.

Vapours may cause drowsiness and dizziness.

Skin contact may produce health damage\*.

Cumulative effects may result following exposure\*.

\* (limited evidence).

**SAFETY**

Do not breathe gas/ fumes/ vapour/ spray.

Avoid contact with eyes.

Wear suitable protective clothing.

To clean the floor and all objects contaminated by this material use water and detergent.

This material and its container must be disposed of in a safe way.

Keep away from food drink and animal feeding stuffs.

Take off immediately all contaminated clothing.

In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.

If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre (show this container or label).

Use appropriate container to avoid environment contamination.

Avoid release to the environment. Refer to special instructions/ safety data sheets.

**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

NAME	CAS RN	%
aromatic 150	64742-95-6.	>60
nylonic polymer resin proprietary		10-30

**Section 4 - FIRST AID MEASURES****SWALLOWED**

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

**EYE**

**NYALIC HBI-101**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

**Hazard Alert Code:  
MODERATE**

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**SKIN**

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

**INHALED**

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

**NOTES TO PHYSICIAN**

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO<sub>2</sub> 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

**Section 5 - FIRE FIGHTING MEASURES****EXTINGUISHING MEDIA**

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

**FIRE FIGHTING**

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Avoid spraying water onto liquid pools.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

**FIRE/EXPLOSION HAZARD**

- Combustible.
  - Slight fire hazard when exposed to heat or flame.
  - Heating may cause expansion or decomposition leading to violent rupture of containers.
  - On combustion, may emit toxic fumes of carbon monoxide (CO).
  - May emit acrid smoke.
  - Mists containing combustible materials may be explosive.
- Combustion products include: carbon dioxide (CO<sub>2</sub>), other pyrolysis products typical of burning organic material.

**FIRE INCOMPATIBILITY**

Avoid contamination with strong oxidising agents as ignition may result.

**HAZCHEM**

None

**Section 6 - ACCIDENTAL RELEASE MEASURES****EMERGENCY PROCEDURES****MINOR SPILLS**

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.

**NYALIC HBI-101**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

**Hazard Alert Code:  
MODERATE**

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

**MAJOR SPILLS**

Minor hazard.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

**SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS***X: Must not be stored together**O: May be stored together with specific preventions**+: May be stored together***Personal Protective Equipment advice is contained in Section 8 of the MSDS.****Section 7 - HANDLING AND STORAGE****PROCEDURE FOR HANDLING**

Avoid breathing vapours and contact with skin and eyes.

Avoid contact with incompatible materials.

Avoid smoking, naked lights or ignition sources.

Use in a well-ventilated area.

Avoid generation of static electricity.

Earth and secure containers when dispensing or pouring.

Avoid sources of heat. Avoid physical damage to containers.

Wear protective clothing when risk of exposure occurs.

When handling, DO NOT eat, drink or smoke.

Keep containers securely sealed when not in use.

Always wash hands with soap and water after handling. Work clothes should be laundered separately.

Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Use good occupational work practice. Observe manufacturer's storing and handling recommendations.

**SUITABLE CONTAINER**

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

**STORAGE INCOMPATIBILITY**

Avoid storage with oxidisers.

**STORAGE REQUIREMENTS**

- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****EXPOSURE CONTROLS**

The following materials had no OELs on our records

- aromatic 150: CAS:64742-95-6 CAS:64742-94-5

**MATERIAL DATA**

Not available. Refer to individual constituents.

**NYALIC HBI-101**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

**Hazard Alert Code:  
MODERATE**

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

**INGREDIENT DATA**

AROMATIC 150:

CEL TWA: 100 ppm, 550 mg/m<sup>3</sup> as total hydrocarbons [Exxon]**PERSONAL PROTECTION****EYE**

- Safety glasses with side shields; or as required,
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59]

**HANDS/FEET**

Polyethylene gloves.

Nitrile rubber gloves.

Neoprene rubber gloves.

PVC gloves.

Safety footwear.

**OTHER**

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

**RESPIRATOR**

Respiratory protection may be required when ANY "Worst Case" vapour-phase concentration is exceeded (see Computer Prediction in "Exposure Standards").

Protection Factor	Half-Face Respirator	Full-Face Respirator
10 x ES	A--AUS A--PAPR-AUS	-
50 x ES	Air-line*	-
100 x ES	-	A--3
100+ x ES	-	Air-line**

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

**ENGINEERING CONTROLS**

Use in a well-ventilated area.

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances.

If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range

1: Room air currents minimal or favourable to capture

2: Contaminants of low toxicity or of nuisance value only.

Upper end of the range

1: Disturbing room air currents

2: Contaminants of high toxicity

**NYALIC HBI-101****Hazard Alert Code:  
MODERATE**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

3: Intermittent, low production.

3: High production, heavy use

4: Large hood or large air mass in motion

4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE**

Clear colourless liquid with a mild aromatic hydrocarbon odour; does not mix with water.

**PHYSICAL PROPERTIES**

Liquid.

Does not mix with water.

Floats on water.

Molecular Weight: Not applicable

Melting Range (°C): &lt;-60

Solubility in water (g/L): Immiscible

pH (1% solution): Not applicable

Volatile Component (%vol): 74-78

Relative Vapour Density (air=1): &gt;1

Lower Explosive Limit (%): 1.8

Autoignition Temp (°C): 443 approx

State: Liquid

Boiling Range (°C) : 182

Specific Gravity (water=1): 0.93

pH (as supplied): Not applicable

Vapour Pressure (kPa): 0.67 @ 40 degC

Evaporation Rate: &lt;1 Ether=1

Flash Point (°C): 64 (TCC)

Upper Explosive Limit (%): 11.7

Decomposition Temp (°C): Not available

Viscosity: 1.29 cSt@40°C

**Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION****CONDITIONS CONTRIBUTING TO INSTABILITY**

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

**Section 11 - TOXICOLOGICAL INFORMATION****POTENTIAL HEALTH EFFECTS****ACUTE HEALTH EFFECTS****SWALLOWED**

Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

**EYE**

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

**SKIN**

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

**INHALED**

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

**CHRONIC HEALTH EFFECTS**

Principal routes of exposure are by accidental skin and eye contact and by inhalation of vapours especially at higher temperatures.

Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS].

**TOXICITY AND IRRITATION**

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

**TOXICITY**

Oral (-) LD50: &gt;2000 mg/kg [Manufacturer]

Dermal (-) LD50: &gt;2000 mg/kg

**IRRITATION****AROMATIC 150:**

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

**TOXICITY**

Oral (rat) LD50: 3000 mg/kg

Dermal (rabbit) LD50: 3000 mg/kg

**IRRITATION**

Nil Reported

[Manufacturer]

**Section 12 - ECOLOGICAL INFORMATION**

**NYALIC HBI-101****Hazard Alert Code:  
MODERATE**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

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.

The lower molecular weight hydrocarbons are expected to form a "slick" on the surface of waters after release in calm sea conditions. This is expected to evaporate and enter the atmosphere where it will be degraded through reaction with hydroxy radicals.

Some of the material will become associated with benthic sediments, and it is likely to be spread over a fairly wide area of sea floor. Marine sediments may be either aerobic or anaerobic. The material, in probability, is biodegradable, under aerobic conditions (isomerised olefins and alkenes show variable results). Evidence also suggests that the hydrocarbons may be degradable under anaerobic conditions although such degradation in benthic sediments may be a relatively slow process.

Under aerobic conditions the material will degrade to water and carbon dioxide, while under anaerobic processes it will produce water, methane and carbon dioxide.

Based on test results, as well as theoretical considerations, the potential for bioaccumulation may be high. Toxic effects are often observed in species such as blue mussel, daphnia, freshwater green algae, marine copepods and amphipods.

DO NOT discharge into sewer or waterways.

Refer to data for ingredients, which follows:

AROMATIC 150:

Drinking Water Standards:

hydrocarbon total: 10 ug/l (UK max.).

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.

DO NOT discharge into sewer or waterways.

**Section 13 - DISPOSAL CONSIDERATIONS**

- Consult manufacturer for recycling options and recycle where possible .
- Consult State Land Waste Management Authority for disposal.
- Incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

**Section 14 - TRANSPORTATION INFORMATION**

Labels Required: COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA, IMDG

**Section 15 - REGULATORY INFORMATION****POISONS SCHEDULE**

S5, NZ S4

**REGULATIONS**

Nyalic HBI- 101 (CAS: None):

No regulations applicable

aromatic 150 (CAS: 64742- 95- 6) is found on the following regulatory lists;

Australia Hazardous Substances

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

International Council of Chemical Associations (ICCA) - High Production Volume List

OECD Representative List of High Production Volume (HPV) Chemicals

aromatic 150 (CAS: 64742- 94- 5) is found on the following regulatory lists;

Australia Hazardous Substances

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5

International Council of Chemical Associations (ICCA) - High Production Volume List

OECD Representative List of High Production Volume (HPV) Chemicals

**Section 16 - OTHER INFORMATION****Ingredients with multiple CAS Nos**

Ingredient Name	CAS
aromatic 150	64742-95-6, 64742-94-5

**EXPOSURE STANDARD FOR MIXTURES**

"Worst Case" computer-aided prediction of vapour components/concentrations: Composite Exposure Standard for Mixture (TWA)

**NYALIC HBI-101****Hazard Alert Code:  
MODERATE**

Chemwatch Material Safety Data Sheet (REVIEW)

Revision No: 4

Chemwatch 4908-59

Issue Date: 16-Aug-2007

CD 2007/4

(mg/m<sup>3</sup>): 550 mg/m<sup>3</sup> If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed. Component Breathing Zone ppm Breathing Zone mg/m<sup>3</sup> Mixture Conc: (%).

Component	Breathing zone (ppm)	Breathing Zone (mg/m <sup>3</sup> )	Mixture Conc (%)
aromatic 150	100.00	550.0000	90.0

Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone. If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed. At the "Composite Exposure Standard for Mixture" (TWA) (mg/m<sup>3</sup>): 550 mg/m<sup>3</sup>

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

[www.chemwatch.net/references](http://www.chemwatch.net/references).

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: 16-Aug-2007

Print Date: 3-Mar-2008