

# NYALIC<sup>®</sup>

## ChemWatch MSDS for NYALIC HBI-101 NYALIC HBI-101

ChemWatch Material Safety Data Sheet

CHEMWATCH 4908-59

Date of Issue: **Thu 24-Jan-2002**

### IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

#### HAZARDOUS ACCORDING TO WORKSAFE AUSTRALIA CRITERIA

### SUPPLIER

Company: Nyalic NZ Ltd and its subsidiaries  
Address: 39 Totara Street, Dunedin. New Zealand  
Telephone: 64 03 4710 424  
Emergency Tel: 64 03 4710 424

Product Name: Nyalic HBI-101

CAS RN No(s): None  
UN Number: None  
Dangerous Goods Class: None  
Subsidiary Risk: None  
Hazchem Code: None  
Poisons Schedule Number: S5, NZ S4

### USE

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

### PHYSICAL DESCRIPTION/PROPERTIES

#### APPEARANCE

Clear colourless liquid with a mild aromatic hydrocarbon odour; does not mix with water. Viscosity 1.29 cst @ 40 deg.C.

Boiling Point (deg C): 182  
Melting Point (deg C): <-60  
Vapour Pressure (kPa): 0.67 @ 40 degC  
Specific Gravity: 0.93  
Flash Point (deg C): 64 (TCC)  
Lower Explosive Limit (%): 1.8  
Upper Explosive Limit (%): 11.7  
Solubility in Water (g/L): Immiscible

### INGREDIENTS

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

### HEALTH HAZARD

#### 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.

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## EYE

The liquid is highly discomforting to the eyes. The vapour is discomforting to the eyes. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

## SKIN

The liquid may produce skin discomfort following prolonged contact. Defatting and/ or drying of the skin may lead to dermatitis. Toxic effects may result from skin absorption. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

## INHALED

The vapour is discomforting to the upper respiratory tract. Inhalation hazard is increased at higher temperatures.

Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-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]

Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.

## FIRST AID

### SWALLOWED

If poisoning occurs, contact a doctor or Poisons Information Centre. In Australia phone 13 1126; New Zealand 03 4747000. If swallowed, do NOT induce vomiting. Give a glass of water.

### EYE

If this product comes in contact with the eyes:

- 1: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water.
- 2: 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.
- 3: Transport to hospital or doctor without delay.
- 4: Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

If product comes in contact with the skin:

- 1: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
- 2: Wash affected areas thoroughly with water (and soap if available).
- 3: Seek medical attention in event of irritation.

### INHALED

- 1: If fumes or combustion products are inhaled: Remove to fresh air.
- 2: Lay patient down. Keep warm and rested.
- 3: Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures
- 4: If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- 5: Transport to hospital, or doctor.

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## ADVICE TO DOCTOR

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

1. Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
2. 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 or pCO<sub>2</sub> >50 mm Hg) should be intubated.
3. 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.
4. A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5. 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.
6. Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

[Ellenhorn and Barceloux: Medical Toxicology].

## PRECAUTIONS FOR USE

### EXPOSURE STANDARDS

None assigned. Refer to individual constituents.

<aromatic 150>

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



### 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.

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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.)

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Within each range the appropriate value depends on:  
Lower end of the range                      Upper end of the range

- |                                                            |                                  |
|------------------------------------------------------------|----------------------------------|
| 1: Room air currents minimal or favourable to capture      | 1: Disturbing room air currents  |
| 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| 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.

## PERSONAL PROTECTION

### EYE

Safety glasses with side shields; or as required, Chemical goggles.

Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

### HANDS/FEET

Barrier cream and Polyethylene gloves or Nitrile rubber gloves or Neoprene rubber gloves or PVC gloves. Safety footwear.

### OTHER

- 1: Overalls.
- 2: Eyewash unit.

## GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the "Forsberg Protective Clothing Performance Index"

The effect of the following substance(s) is taken into account in the computer-generated selection.

Substance

aromatic 150

\*\* as analogue for CAS 1330-20-7 xylene

Protective Material CPI\*

PVA	A
VITON	A
TEFLON	A
BUTYL/NEOPRENE	C
HYPALON	C
NITRILE	C

CPI\* :- Chemwatch Performance Index

A :- Best Selection

B :- Satisfactory; may degrade after 4 hours continuous immersion

C :- Poor to Dangerous Choice for other than short term immersion

Note: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation.

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## RESPIRATOR

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

Protection Factor (Min)	Half-Face Respirator	Full-Face Respirator	Spray/ Mist Spatter
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10 x ES	A -AUS	-	A -AUS
	A -PAPR-AUS		A -PAPR-AUS
50 x ES	Air-line*	-	-
100 x ES	-	A -3	A -3 ^
100+ x ES	-	Air-line**	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.

## SAFE HANDLING

## STORAGE AND TRANSPORT

### SUITABLE CONTAINER

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



### STORAGE INCOMPATIBILITY

Avoid storage with oxidisers.

### STORAGE REQUIREMENT

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

### TRANSPORTATION

No restrictions.

## SPILLS AND DISPOSAL

### MINOR SPILLS

- 1: Remove all ignition sources.
- 2: Clean up all spills immediately.
- 3: Avoid breathing vapours and contact with skin and eyes.
- 4: Control personal contact by using protective equipment.
- 5: Contain and absorb spill with sand, earth, inert material or vermiculite.
- 6: Wipe up.
- 7: Place in a suitable labelled container for waste disposal.

### MAJOR SPILLS

Minor hazard.

- 1: Clear area of personnel and move upwind.
- 2: Alert Fire Brigade and tell them location and nature of hazard.
- 3: Wear breathing apparatus plus protective gloves.
- 4: Prevent, by any means available, spillage from entering drains or water course.
- 5: No smoking, naked lights or ignition sources.

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- 6: Increase ventilation.
- 7: Stop leak if safe to do so.
- 8: Contain spill with sand, earth or vermiculite.
- 9: Collect recoverable product into labelled containers for recycling.
- 10: Absorb remaining product with sand, earth or vermiculite.
- 11: Collect solid residues and seal in labelled drums for disposal.
- 12: Wash area and prevent runoff into drains.
- 13: If contamination of drains or waterways occurs, advise emergency services.

## DISPOSAL

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

## FIRE/EXPLOSION HAZARD

Combustible. Will burn if ignited.

Moderate fire hazard when exposed to heat, flame or oxidisers.

Moderate explosion hazard when exposed to flame or involved in fire.

Heating may cause expansion or decomposition leading to violent rupture of containers.

Combustion products include carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO).

## CONTACT POINT

### CONTACT

**AUSTRALIAN POISONS INFORMATION CENTRE** ©  
**24 HOUR SERVICE** 13 11 26  
**POLICE OR FIRE BRIGADE** 000 (exchange):-1100

### NEW ZEALAND POISONS INFORMATION CENTRE

**Dunedin** (03)479 1200 (Normal Hours)  
(03)474 0999 (Emergency)

End of Report

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