

**Material Safety Data Sheet****NVA405 ENVIROLINE 405HT PART B****Version Number 1 Revision Date 06/20/14****1. Product and company identification**

Hazardous according to criteria of Australian WHS Regulations.  
Classified as a Dangerous Good for transport according to the latest ADG code.

**1.1. Product identifier** ENVIROLINE 405HT PART B

Product Code NVA405

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

Intended use Refer Technical Data Sheet.  
For professional use only.

This product is intended for use in the  
Marine and Protective Coatings markets.

Application Method Refer Technical Data Sheet.

Apply by brush and roller for small areas.  
Airless spray for large areas.

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer** Akzo Nobel Pty Ltd.  
8 Kellaway Place  
Wetherill Park  
New South Wales  
Australia, 2164

**Telephone No.** (02) 9616 6900**Fax No.** (02) 9609 3910**1.4. Emergency telephone number** 1800 680 071**For Poisons Advice telephone** 131 126 For Advice to Doctors & Hospitals only**2. Hazard identification of the product****2.1. Classification of the substance or mixture**

Acute Tox. 4;H302	Harmful if swallowed.
Acute Tox. 3;H331	Toxic if inhaled.
Skin Corr. 1;H314	Causes severe skin burns and eye damage.
Eye Dam. 1;H318	Causes serious eye damage.
Skin Sens. 1;H317	May cause an allergic skin reaction.
STOT RE 2;H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

**2.2. Label elements**

Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.



## Danger

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Poison Schedule: 5

Precautionary Phrases (P) listed below:

### **[Prevention]:**

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P260 Do not breathe mist / vapours / spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

### **[Response]:**

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+352 IF ON SKIN: Wash with soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P311 Call a POISON CENTER or doctor / physician.

P314 Get Medical advice / attention if you feel unwell.

P321 Specific treatment (see information on this label).

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use alcohol resistant foam, CO<sub>2</sub>, powder, water spray for extinction. Do not use water jet.

P391 Collect spillage.

### **[Storage]:**

P403+235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

### **[Disposal]:**

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

### **2.3. Other hazards**

This product contains no PBT/vPvB chemicals.

### 3. Composition/information on ingredients

This product contains the following substances that are classified hazardous according to the Australian WHS Hazardous Substances regulations:

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Crystalline Silica - Quartz CAS Number: 0014808-60-7	25-50	Acute Tox. 4;H332 STOT RE 2;H373	[1][2]
4,4'-Diaminodicyclohexylmethane CAS Number: 0001761-71-3	10-25	Acute Tox. 4;H302 Skin Corr. 1;H314 Skin Sens. 1;H317 Aquatic Chronic 2;H411	[1]
Cycloaliphatic Amine CAS Number: Not Available	2.5-10		[1]
Nonylphenol CAS Number: 0025154-52-3	2.5-10	Repr. 2;H361fd Acute Tox. 4;H302 Skin Corr. 1B;H314 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Xylene CAS Number: 0001330-20-7	1-2.5	Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315 Asp. Tox. 1;H304 Eye Irrit. 2;H319 STOT SE 3;H335	[1][2]
Diethylene triamine CAS Number: 0000111-40-0	1-2.5	Acute Tox. 4;H312 Acute Tox. 4;H302 Skin Corr. 1B;H314 Skin Sens. 1;H317	[1][2]
Diphenylolpropane CAS Number: 0000080-05-7	<1	Repr. 2;H361f STOT SE 3;H335 Eye Dam. 1;H318 Skin Sens. 1;H317	[1]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the Hazard (H) phrases are shown in Section 16.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence do not require reporting in this section.

### 4. First aid measures

#### 4.1. Description of first aid measures

##### General

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

##### Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

##### Skin Contact

Remove contaminated clothing immediately. Wash skin thoroughly with soap and water or use a recognised skin cleanser. Do NOT use solvents and thinners. Do NOT reuse clothing without thorough cleaning, preferably dispose of the contaminated clothing.

##### Eye Contact

Material is corrosive. Severe damage to eyes will result unless urgent attention is given. Irrigate copiously with clean fresh water for at least 15 minutes, holding the eyelids apart. Immediately seek medical attention.

### **Ingestion**

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

No data available

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

No data available

## **5. Fire-fighting measures**

### **5.1. Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.

Do not use - water jet.

Note; Fire will produce dense black smoke. Decomposition products may be hazardous to health. Avoid exposure and use breathing apparatus as appropriate.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

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

Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Avoid exposure and use breathing apparatus as appropriate.

### **5.3. Advice for fire-fighters**

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

## **6. Accidental release measures**

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

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapour levels are below the Lower Explosive Limit before re-entering.

### **6.2. Environmental precautions**

Do not allow spills to enter drains or watercourses.

### **6.3. Methods and material for containment and cleaning up**

Contain and absorb spillage with non-combustible materials e.g: sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to relevant State and/or Federal regulations. (See Section 13).

Clean, preferably with a detergent. Do NOT use solvents.

Do NOT allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the relevant Environment Protection Agency.

Empty containers may contain residues, including flammable or explosive vapours. Do NOT cut, puncture or weld on or near containers. All label warnings must be observed until the containers have been cleaned or reconditioned.

## **7. Handling and storage**

## 7.1. Precautions for safe handling

### Handling

This product contains solvents. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

### In Storage

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

## 7.2. Conditions for safe storage, including any incompatibilities

Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

Avoid skin and eye contact. Avoid inhalation of vapours and spray mists. Observe label precautions. Use personal protection as shown in section 8.

Smoking, eating and drinking should be prohibited in all preparation and application areas.

Never use pressure to empty a container; containers are not pressure vessels.

There are no exposure scenarios, see details in section 1.

## 7.3. Specific end use(s)

Store in a well ventilated, dry place away from sources of heat and direct sunlight.

Store on concrete or other impervious floor, preferably with bunding to contain any spillage. Do not stack more than 3 pallets high.

Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in the original container or one of the same material.

Prevent unauthorised access.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

From Australia's Hazardous Substance Information System (HSIS)

For detailed information refer to the HSIS web site (<http://hsis.ascc.gov.au>).

Material	Short term (15m ave STEL)		Long term (8hr TWA)		Comments
	ppm	mg/m <sup>3</sup>	ppm	mg/M3	
Crystalline Silica - Quartz	-	-	-	0.2	
Diethylene triamine	-	-	1	4.2	Skin absorber
Mica	-	-	-	2.5	
Titanium dioxide	-	-	-	10	
Xylene	150	655	80	350	

Chemicals classified as hazardous according to WHS regulations may have a notification alongside the exposure standard. If such a notification is necessary, it will appear in the far right hand column. The legend is as follows:

(P) Peak exposure limit

(R) Suppliers Recommended Limit

(Sk) There is a risk of absorption through unbroken skin

(Sen) Sensitiser

(Cat1) Category 1 - established human carcinogen

(Cat2) Category 2 - probable human carcinogen  
(Cat3) Category 3 - substances suspected of having carcinogenic potential.

There is no biological limit allocated.

#### **DNEL/PNEC values**

No Data Available

#### **8.2. Exposure controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.

#### **Eye Protection**

Wear a full face shield if mixing or pouring this material.

#### **Skin Protection**

Wear gloves. Gloves must be resistant to corrosive materials. Nitrile or PVC gloves are suitable. Do NOT use cotton or leather gloves.

#### **Other**

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

#### **Respiratory Protection**

In Liquid, Paste or Atomised form (e.g. Spray Application), workers must wear respirators with a filter Type A (Organic vapour) approved in accordance with AS/NZS 1716.

Provision of other controls such as exhaust ventilation should be considered if practical.

If applying large volumes (>100L) and If there is not sufficient ventilation or if there is a confined space, an Air Fed Respirator is strongly recommended.

In Solid or Dust form (e.g. Sanding Cured product) workers must wear a Class P1 Particulate filter mask in accordance with AS/NZS1716.

#### **Thermal hazards**

No Data Available

### **9. Physical and chemical properties**

<b>Colour</b>	Light Coloured Liquid
<b>Odour</b>	Smell of Solvent
<b>Odour threshold</b>	Not Measured
<b>pH</b>	N/A
<b>Melting point / freezing point (°C)</b>	Not Measured
<b>Initial boiling point and boiling range (°C)</b>	108
<b>Flash Point (deg C closed cup)</b>	66
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	Lower Explosive Limit: 1.1 ( Xylene ) Upper Explosive Limit: 6.6 ( Xylene )
<b>Vapour pressure (Pa)</b>	Not Measured
<b>Vapour Density</b>	Heavier than air.
<b>Specific Gravity</b>	1.66

<b>Solubility in Water</b>	Immiscible
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Autoignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	N/A

## 9.2. Other information

No further information

# 10. Stability and reactivity

## 10.1. Reactivity

No data available

## 10.2. Chemical stability

Chemical stability

Stable under recommended storage and handling conditions (see section 7).

Conditions to avoid

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions.

Incompatible materials

Strong acids, bases, oxidising agents.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Hazardous reactions

None.

## 10.3. Possibility of hazardous reactions

May react exothermically with: oxidising agents, strong alkalis, strong acids.

## 10.4. Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

## 10.6. Hazardous decomposition products

Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Avoid exposure and use breathing apparatus as appropriate.

# 11. Toxicological information

## Acute toxicity

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible irreversible damage.

Amine based materials may cause skin irritation and sensitisation.

The preparation has been assessed using the Acute Toxicity Data listed below, and classified for

toxicological hazards accordingly. See section 2 for details.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr
4,4'-Diaminodicyclohexylmethane - (1761-71-3)	1,000.00, Rat	Not Applicable	Not Applicable	0.40, Mouse
Crystalline Silica - Quartz - (14808-60-7)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Cycloaliphatic Amine - (Not Available)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Diethylene triamine - (111-40-0)	1,080.00, Rat	1,090.00, Rabbit	Not Applicable	Not Applicable
Diphenylolpropane - (80-05-7)	5,000.00, Rat	3,000.00, Rabbit	Not Applicable	Not Applicable
Nonylphenol - (25154-52-3)	580.00, Rat	2,000.00, Rabbit	Not Applicable	Not Applicable
Xylene - (1330-20-7)	4,299.00, Rat	1,548.00, Rabbit	Not Applicable	20.00, Rat

Item	Category	Hazard
Acute Toxicity (mouth)	4	Harmful if swallowed.
Acute Toxicity (skin)	Not Classified	Not Applicable
Acute Toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	1	Causes severe skin burns and eye damage.
Eye damage/irritation	1	Causes serious eye damage.
Sensitization (respiratory)	Not Classified	Not Applicable
Sensitization (skin)	1	May cause an allergic skin reaction.
Germ toxicity	Not Classified	Not Applicable
Carcinogenicity	Not Classified	Not Applicable
Reproductive Toxicity	Not Classified	Not Applicable
Specific target organ systemic toxicity (single exposure)	Not Classified	Not Applicable
Specific target organ systemic Toxicity (repeated exposure)	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not Classified	Not Applicable

## 12. Ecological information

### 12.1. Toxicity

The preparation has been assessed according to the GHS criteria and is classified as dangerous for the environment, using the toxicity data listed below.

There are no data available on the product itself.

The product should not be allowed to enter drains or water courses.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Crystalline Silica - Quartz - (14808-60-7)	Not Applicable	Not Applicable	Not Applicable
4,4'-Diaminodicyclohexylmethane - (1761-71-3)	46.00, Leuciscus idus	6.84, Daphnia magna	140.00 (72 hr), Algae



Cycloaliphatic Amine - (Not Available)	Not Applicable	Not Applicable	Not Applicable
Nonylphenol - (25154-52-3)	0.135, Pimephales promelas	0.104, Daphnia magna	1.30 (72 hr), Scenedesmus subspicatus
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Diethylene triamine - (111-40-0)	1,014.00, Poecilia reticulata	53.50, Daphnia magna	345.60 (96 hr), Pseudokirchneriella subcapitata
Diphenylolpropane - (80-05-7)	4.60, Pimephales promelas	7.75, Daphnia magna	2.73 (96 hr), Pseudokirchneriella subcapitata

## 12.2. Persistence and degradability

There is no data available on the preparation itself.

## 12.3. Bioaccumulative potential

Not Measured

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

## 12.6. Other adverse effects

No data available

## 13. Disposal considerations

### 13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and empty containers should be disposed of in accordance with State and Federal regulations.

Using information provided in this data sheet advice should be obtained from the local Waste Regulation Authority as to whether special waste regulations apply.

## 14. Transport information

14.1. UN number 3066  
 14.2. UN proper shipping name PAINT  
 14.3. Transport hazard class(es)

Road and Rail Transport (ADG7) 3066, PAINT, 8, II, 2X

IMDG Class/Div 8 Sub Class  
 reference :

Ems F-A,S-B

ICAO/IATA Class 8 Sub Class

14.4. Packing group II

### 14.5. Environmental hazards

Road and Rail Environmentally Hazardous: Yes  
 Transport

(ADG7)

**IMDG reference :** Marine Pollutant: Yes ( 4,4'-Diaminodicyclohexylmethane )

#### 14.6. Special precautions for user

No further information

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

Not Applicable

### 15. Regulatory information

The product and all its components complies with these local regulations

Australia:

The Australian Industrial Chemicals (Notification and Assessment) Act 1989 (Commonwealth) - NICNAS

New Zealand:

The New Zealand inventory of chemicals (NZIoC) or otherwise are in compliance with all other EPA NZ requirements.

Singapore:

The labelling, SDS, PEL and other requirements to the WSH (General Provision) regulations

Other regional regulatory Information:

None noted.

### 16. Other information

Contact Point:

Marine, Protective and Yacht Coatings Regulatory Affairs Manager  
+61 (0)407 119 025

The information on this Safety Data Sheet (SDS) is based upon the present state of our knowledge and on current State and Federal laws. The product should not be used for purposes other than shown in the SDS without first obtaining written advice. It is always the responsibility of the user to take all necessary steps to meet the demands of applicable legislation.

The information in this SDS is required according to State and Federal WHS legislation (as amended). Each user should read the SDS and consider the information of how this product is used and handled in conjunction with other products and components.

The information provided in this SDS 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, unless specified in the text.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and not to be considered a warranty or quality specification.

The full text of the Hazard (H) phrases appearing in section 2 & 3 are:

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness and dizziness.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

**This SDS is valid for 5 years from the revised date on page 1.  
The revision date is in American format (e.g. MM/DD/YY).**

End of document



All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.