

Mirotone

Chemwatch: **5072-94** Version No: **9.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 05/14/2014 Print Date: 10/08/2015 Initial Date: Not Available

S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	NATUROIL 3100
Synonyms	Product Code: 1400-9
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

For full details on application and properties consult the technical application. An air drying oil based coating for timber floors.

Details of the supplier of the safety data sheet

Registered company name	Mirotone	Mirotone (Mirotone (NZ))		
Address	21 Marigold Street Revesby 2212 NSW Australia	32 Cryers Road East Tamaki, Manukau 2163 Auckland New Zealand		
Telephone	+61 2 9795 3700	0800 FINISH (0800 34 64 74)		
Fax	+61 2 9771 3601	0800 34 64 34		
Website	www.mirotone.com, www.polycure.com.au	www.mirotone.co.nz		
Email	Not Available	Not Available		

Emergency telephone number

Association / Organisation	Not Available	Not Available	
Emergency telephone numbers	1800 039 008 (Aust)	1800 039 008 (Aust)	
Other emergency telephone numbers	+61 3 9573 3112 (International)	+ 61 3 9573 3112 (International)	

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2	
1800 039 008	+612 9186 1132	Not Available	

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

Chemwatch: **5072-94**Version No: **9.1.1.1**

Page 2 of 11

NATUROIL 3100

Issue Date: **05/14/2014**Print Date: **10/08/2015**



Poisons Schedule	S5
GHS Classification ^[1]	Flammable Liquid Category 3, Reproductive Toxicity Category 2, STOT - SE (Resp. Irr.) Category 3, STOT - SE (Narcosis) Category 3, Aspiration Hazard Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements









SIGNAL WORD

DANGER

Hazard statement(s)

H226	Flammable liquid and vapour
H361	Suspected of damaging fertility or the unborn child
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H304	May be fatal if swallowed and enters airways
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P281	Use personal protective equipment as required.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider
P308+P313	IF exposed or concerned: Get medical advice/attention.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P391	Collect spillage.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.		
P405	Store locked up.		
P403+P233	Store in a well-ventilated place. Keep container tightly closed.		

Precautionary statement(s) Disposal

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

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Issue Date: **05/14/2014**Print Date: **10/08/2015**

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	30-60	naphtha petroleum solvents
Not Available	30-60	resin
1330-20-7	1-10	xylene
100-41-4	<1	ethylbenzene
8002-09-3	<1	pine oil
13586-82-8	<1	cobalt 2-ethylhexanoate
Not Available	NotSpec.	ingredients determined not to be hazardous

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: • Wash out immediately with fresh 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. • Seek medical attention without delay; if pain persists or recurs seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	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.
Inhalation	 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.
Ingestion	 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. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

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 (pO2 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]

Chemwatch: **5072-94**Version No: **9.1.1.1**

Page 4 of 11

NATUROIL 3100

Issue Date: **05/14/2014**Print Date: **10/08/2015**

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Alcohol stable foam.
- ► Dry chemical powder.
- ▶ BCF (where regulations permit).
- ► Carbon dioxide.
- ▶ Water spray or fog Large fires only.

Do not use a water jet to fight fire.

Special hazards arising from the substrate or mixture

Fire Incompatibility

 Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ► May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- ▶ Prevent, by any means available, spillage from entering drains or water course.
- ▶ If safe, switch off electrical equipment until vapour fire hazard removed.
- ▶ Use water delivered as a fine spray to control fire and cool adjacent area.

Fire/Explosion Hazard

- Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.
- ▶ Vapour forms an explosive mixture with air.
- ▶ Moderate explosion hazard when exposed to heat or flame.
- Vapour may travel a considerable distance to source of ignition.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- Remove all ignition sources.Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- ► Control personal contact with the substance, by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- ▶ Wipe up.

Major Spills

- ▶ Clear area of personnel and move upwind.
- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ May be violently or explosively reactive.
- 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.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- ► Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- ▶ DO NOT enter confined spaces until atmosphere has been checked.
- ► Avoid smoking, naked lights or ignition sources.

- ▶ Store in original containers in approved flammable liquid storage area.
- ▶ Store away from incompatible materials in a cool, dry, well-ventilated area.
- ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

Other information

- ▶ No smoking, naked lights, heat or ignition sources.
- ▶ Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.

Issue Date: **05/14/2014**Print Date: **10/08/2015**

NATUROIL 3100

Conditions for safe storage, including any incompatibilities

Packing as supplied by manufacturer.
 Plastic containers may only be used if approved for flammable liquid.
 Check that containers are clearly labelled and free from leaks.

For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.

▶ For materials with a viscosity of at least 2680 cSt.

Storage incompatibility

▶ Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	xylene	Xylene (o-, m-, p- isomers)	350 mg/m3 / 80 ppm	655 mg/m3 / 150 ppm	Not Available	Not Available
Australia Exposure Standards	ethylbenzene	Ethyl benzene	434 mg/m3 / 100 ppm	543 mg/m3 / 125 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
xylene	Xylenes	Not Available	Not Available	Not Available
ethylbenzene	Ethyl benzene	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
naphtha petroleum solvents	Not Available	Not Available
resin	Not Available	Not Available
xylene	1,000 ppm	900 ppm
ethylbenzene	2,000 ppm	800 [LEL] ppm
pine oil	Not Available	Not Available
cobalt 2-ethylhexanoate	Not Available	Not Available
ingredients determined not to be hazardous	Not Available	Not Available

Exposure controls

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.

Appropriate engineering controls

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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Personal protection











- ► Safety glasses with side shields.
- ▶ Chemical goggles.

Eye and face protection

• Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses 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.

Skin protection

See Hand protection below

Hands/feet protection

- ► Wear chemical protective gloves, e.g. PVC.
- ► Wear safety footwear or safety gumboots, e.g. Rubber

Body protection See Other protection below Overalls. ▶ PVC Apron. Other protection ▶ PVC protective suit may be required if exposure severe. ▶ Eyewash unit. • Ensure there is ready access to a safety shower. Thermal hazards Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

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

NATUROIL 3100

Material	СРІ
TEFLON	A
VITON	A
BUTYL	С
BUTYL/NEOPRENE	С
HYPALON	С
NAT+NEOPR+NITRILE	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С

- * 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. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Issue Date: 05/14/2014

Print Date: 10/08/2015

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	A-AUS / Class 1 P3	-	A-PAPR-AUS / Class 1 P3
up to 25 x ES	Air-line*	A-2 P3	A-PAPR-2 P3
up to 50 x ES	-	A-3 P3	-
50+ x ES	-	Air-line**	-

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

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, violet coloured, low viscosity flammable liquid with a solvent odour; not miscible with water.		
			1
Physical state	Liquid	Relative density (Water = 1)	0.84-0.93
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	>200
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	70-110 @25C

Issue Date: 05/14/2014

Print Date: 10/08/2015

Initial boiling point and boiling range (°C)	152 (IBP)	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	44	Taste	Not Available
Evaporation rate	0.43 BuAC = 1	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	7	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	0.8	Volatile Component (%vol)	60-73 (VOC = 466-515 g/l)
Vapour pressure (kPa)	0.37 @25C	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	4.4	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Toxic effects may result from skin absorption Aromatic hydrocarbons may produce sensitivity and redness of the skin. They are not likely to be absorbed into the body through the skin but branched species are more likely to.
Еуе	There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion.
Chronic	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function.

Mutagenicity

0

Issue Date: **05/14/2014**Print Date: **10/08/2015**

allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the				
	NATUROIL 3100		<u> </u>	
Demail (riabbil) LDSc: >1700 mg/kg ^{2/3} Eye (rhabalt): 200 ppm irritant		Not Available	Not Availabl	e
Inhalation (rat) LC60- 5000 ppm/sh ^{DI} Oral (rat) LD50: 4300 mg/kg ^{CI} Eye (rabbit): 5 mg/24h SEVERE Eye (rabbit): 5 mg mild Skin rabbit): 500 mg/24h moderate Inhalation (mouse) LC50: 35.5 mg/L2H ^{CI} Inhalation (rat) LC50: 55 mg/L2H ^{CI} Inhalation (rat) LC50: 5500 mg/kg ^{CI} Skin (rabbit): 15 mg/24h mild Inhalation (rat) LC50: 5000 mg/kg ^{CI} Skin (rabbit): 500 mg/24h-SEVERE Oral (rat) LD50: 3200 mg/kg ^{CI} Skin (rabbit): 500 mg/24h-SEVERE Oral (rat) LD50: 3200 mg/kg ^{CI} Skin (rabbit): 500 mg/24h-SEVERE Oral (rat) LD50: 3200 mg/kg ^{CI} Inhalation (rat) LC50: 5000 mg/kg ^{CI} Skin (rabbit): 500 mg/24h-SEVERE Oral (rat) LD50: 3200 mg/kg ^{CI} Inhalation (rat) LC50: 5000 mg/kg		TOXICITY	IRRITATION	
Coral (rat) LDS0: 4300 mg/kg ^{2/2} Eye (rabbit): 87 mg mild Skin (rabbit): 500 mg/24h moderate		Dermal (rabbit) LD50: >1700 mg/kg ^[2]	Eye (human): 200 ppm irritant
TOXICITY RRITATION Remain (rat) LD50: 3200 mg/kg ¹³ Not Available Rritation R	xylene	Inhalation (rat) LC50: 5000 ppm/4h ^[2]	Eye (rabbit):	5 mg/24h SEVERE
ethylbenzene ethyl		Oral (rat) LD50: 4300 mg/kgt ^[2]	Eye (rabbit):	87 mg mild
ethylbenzene ethyl			Skin (rabbit)	:500 mg/24h moderate
Inhalation (mouse) LCSD: 35.5 mg/L2H ²¹ Skin (rabbit): 15 mg/24h mild		TOXICITY	IRRITATION	
Inhalation (rat) LC50: 55 mg/L/2H ²¹ Oral (rat) LD50: 3500 mg/kgd ^[2] TOXICITY IRRITATION Dermal (rabbit) LD50: 5000 mg/kg ^[2] Skin (rabbit): 500 mg/24h-SEVERE Oral (rat) LD50: 3200 mg/kg ^[2] TOXICITY IRRITATION dermal (rat) LD50: 3200 mg/kg ^[2] TOXICITY IRRITATION dermal (rat) LD50: 3200 mg/kg ^[2] Not Available Oral (rat) LD50: 3200 mg/kg ^[2] Not Available Oral (rat) LD50: 3200 mg/kg ^[2] Not Available Oral (rat) LD50: 3129 mg/kg ^[1] Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances XYLENE XYLENE The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritation 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. NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritation may produce occupiuncivitis. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritation may produce or occupiancivitis. 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. Enthylberance is readily absorbed when inhaled, availlowed or in contact with the skin, it is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (museculos		Dermal (rabbit) LD50: ca.15432.6 mg/kg ^[1]	Eye (rabbit):	500 mg - SEVERE
Toxicity	ethylbenzene	Inhalation (mouse) LC50: 35.5 mg/L/2H ^[2]	Skin (rabbit)	: 15 mg/24h mild
TOXICITY Dermal (rabint) LD50: 5000 mg/kg ^[21] Skin (rabbit): 500 mg/24h-SEVERE		Inhalation (rat) LC50: 55 mg/L/2H ^[2]	 	
Dermal (rabbit) LD50: 5000 mg/kg ^[2] Oral (rat) LD50: 3200 mg/kg ^[2] TOXICTY cobalt 2-ethylhexanoate TOXICTY dermal (rat) LD50: >2000 mg/kg ^[3] Not Available Oral (rat) LD50: 3209 mg/kg ^[3] Not Available Oral (rat) LD50: 3229 mg/kg ^[3] Not Available Oral (rat) LD50: 3229 mg/kg ^[3] Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. The substance is classified by JARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Ethylhozene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may not be specific to this product. Contact allergies quickly manifast themselves as contact eczema, more rarely as urticaria or Quincke's codema. The pathogenesis of contact eczema involves		Oral (rat) LD50: 3500 mg/kgd ^[2]		
Cobalt 2-ethylhexanoate TOXICITY		TOXICITY	IRRITATION	
TOXICITY dermal (rat) LD50: >2000 mg/kg ^[1] Not Available Oral (rat) LD50: 3129 mg/kg ^[1] Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure in the substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce exposure in the skin. The material may produce conjunctivitis. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. Ethylenzene is readily absorbed when inhaled, swallowed or in contact with the exim. It is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. T	pine oil	Dermal (rabbit) LD50: 5000 mg/kg ^[2]	Skin (rabbit)	: 500 mg/24h-SEVERE
Cobalt Commail (rat) LD50: >2000 mg/kg ⁽¹⁾ Not Available		Oral (rat) LD50: 3200 mg/kg ^[2]		
2-ethylhexanoate Coral (rat) LD50: 3129 mg/kg ⁻¹		TOXICITY	IRRITATION	
Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritants may produce conjunctivitis. The material may acuses 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. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritants may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposur to irritants may produce conjunctivitis. 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. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's cedema. The pathogenesis of contact eczema involves a cell-mediated (IT lymphocytes) immune reactions. The significance of the contact allergen is not simply determined by its sensitiation potential: the		dermal (rat) LD50: >2000 mg/kg ^[1]	Not Availabl	e
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as uriticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact uriticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be more important allergen than one with stronger sensitising potential with which few individua	2-etnylnexanoate	Oral (rat) LD50: 3129 mg/kg ^[1]		
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may roduce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact ezzema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact ezzema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact uricaria, involve antibody-mediated immune reactions. The significance of the contact allergen is no	Legend:	Value obtained from Europe ECHA Registered	Substances - Acute toxicity 2	.* Value obtained from manufacturer's SDS.
to irritants may produce conjunctivitis. 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. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the bod and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact uricaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be more important allergen than one with stronger sensitising potential with which few individuals come into contact. Acute Toxicity Carcinogenicity Reproductivity Skin Irritation/Corrosion Respiratory or Skin Respiratory or Skin	XYLENE	swelling, the production of vesicles, scaling ar The substance is classified by IARC as Group NOT classifiable as to its carcinogenicity to he Evidence of carcinogenicity may be inadequat	nd thickening of the skin. 3: umans.	
Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be more important allergen than one with stronger sensitising potential with which few individuals come into contact. Acute Toxicity	ETHYLBENZENE	to irritants may produce conjunctivitis. The material may cause skin irritation after proswelling, the production of vesicles, scaling are Ethylbenzene is readily absorbed when inhaled and passed out through urine. It may irritate the Liver changes, utheral tract, effects on fertilit	olonged or repeated exposure and thickening of the skin. d, swallowed or in contact with the skin, eyes and may cause	e and may produce on contact skin redness, In the skin. It is distributed throughout the body hearing loss if exposed to high doses.
Skin Irritation/Corrosion Serious Eye Damage/Irritation Respiratory or Skin Strict - Single Exposure Strict - Repeated	PINE OIL & COBALT 2-ETHYLHEXANOATE	Contact allergies quickly manifest themselves pathogenesis of contact eczema involves a ce allergic skin reactions, e.g. contact urticaria, ir contact allergen is not simply determined by it opportunities for contact with it are equally imp	as contact eczema, more ra bll-mediated (T lymphocytes) nvolve antibody-mediated imi s sensitisation potential: the portant. A weakly sensitising	rely as urticaria or Quincke's oedema. The immune reaction of the delayed type. Other mune reactions. The significance of the distribution of the substance and the substance which is widely distributed can be
Skin Irritation/Corrosion Serious Eye Damage/Irritation Respiratory or Skin Strict - Single Exposure Strict - Repeated	Acute Toxicity	0	Carcinogenicity	0
Serious Eye Damage/Irritation Respiratory or Skin STOT - Single Exposure STOT - Repeated	Skin	_		
Respiratory or Skin STOT - Repeated				· ·
	Serious Eye	0	STOT - Single	
	Serious Eye Damage/Irritation		STOT - Single Exposure	✓

Aspiration Hazard

Chemwatch: **5072-94**Version No: **9.1.1.1**

Page **9** of **11**NATUROIL 3100

Issue Date: **05/14/2014**Print Date: **10/08/2015**

Legena:

🗶 – Data available but does not fill the criteria for classification

○ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

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

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
xylene	MEDIUM (BCF = 740)
ethylbenzene	LOW (BCF = 79.43)

Mobility in soil

Ingredient	Mobility
ethylbenzene	LOW (KOC = 517.8)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- ▶ 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 TRANSPORT INFORMATION

Labels Required



Marine Pollutant



HAZCHEM

•3Y

Land transport (ADG)

UN number	1263
Packing group	III
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Environmental hazard	No relevant data
Transport hazard class(es)	Class 3 Subrisk Not Applicable
Special precautions for user	Special provisions 163 223 * Limited quantity 5 L

UN number	1263			
Packing group	III			
UN proper shipping name	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)			
Environmental hazard	No relevant data			
Transport hazard class(es)	ICAO/IATA Class	3		
	ICAO / IATA Subrisk	Not Applicable		
	ERG Code	3L		
Special precautions for user	Special provisions		A3 A72 A192	
	Cargo Only Packing Ir	nstructions 366		
	Cargo Only Maximum	Qty / Pack	220 L	
	Passenger and Cargo Packing Instructions		355	
	Passenger and Cargo	Maximum Qty / Pack	60 L	
	Passenger and Cargo	Limited Quantity Packing Instructions	Y344	
	Passenger and Cargo	Limited Maximum Qty / Pack	10 L	

Issue Date: 05/14/2014

Print Date: 10/08/2015

Sea transport (IMDG-Code / GGVSee)

UN number	1263	
Packing group	III	
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	
Environmental hazard	Not Applicable	
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk Not Applicable	
Special precautions for user	EMS Number F-E , S-E Special provisions 163 223 955 Limited Quantities 5 L	

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	xylene	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	ethylbenzene	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	pine oil	х
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	cobalt 2-ethylhexanoate	Y

SECTION 15 REGULATORY INFORMATION

Page 11 of 11

NATUROIL 3100

Issue Date: **05/14/2014**Print Date: **10/08/2015**

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ETHYLBENZENE(100-41-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

PINE OIL(8002-09-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

COBALT 2-ETHYLHEXANOATE(13586-82-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (xylene; ethylbenzene; pine oil; cobalt 2-ethylhexanoate)
China - IECSC	N (pine oil)
Europe - EINEC / ELINCS / NLP	N (pine oil)
Japan - ENCS	N (pine oil)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
cobalt 2-ethylhexanoate	13586-82-8, 136-52-7

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

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.