

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**Product Name: NORDALE N100**

Use: Brushable solvent based contact adhesive
Supplier: Nordale Australasia
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Campbellfield VIC 3163
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SECTION 2. HAZARDS IDENTIFICATION**GHS Classification:** Signal word : DANGER

Flammable liquid - category 2

Skin corrosion/irritation - category 2

Toxic to Reproduction - category 2

Eye Irritation - category 2

Aspiration Hazard - category 1

Specific target organ toxicity (repeated exposure) - category 2

Pictograms : flame, health hazard, exclamation mark

**Hazard Statements**

H225 – Highly flammable liquid and vapour.

H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H335 – May cause respiratory irritation.

H336 – May cause drowsiness or dizziness.

H361 – Suspected of damaging fertility or the unborn child .

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

Precautionary Statements-Prevention

P101 – If medical advice is needed, have product container or label at hand.

P102 – Keep out of reach of children.

P103 – Read label before use.

P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.

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

P233 – Keep container tightly closed.

P240 – Ground/bond container and receiving equipment.

P241 – Use explosion-proof electrical/ventilating/lighting/equipment.

P242 – Use only non-sparking tools.

P243 – Take precautionary measures against static discharge.

P260 – Do not breathe mist/vapours/spray.

P262 – Do not get in eyes, on skin, or on clothing.

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.
- P273 – Avoid release to the environment.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- AUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements-Response

- P301 + P310 + P331– IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
- P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.
- P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P309 + P311 – IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
- P332 + P313 – If skin irritation occurs: Get medical advice/attention.
- P337 + P313 – If eye irritation persists: Get medical advice/attention.
- P362 – Take off contaminated clothing and wash before reuse.
- P370 + P378 – In case of fire: Use dry sand, powder or foam extinguisher for extinction.

Precautionary Statements-Storage

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

Precautionary Statements-Disposal

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

SECTION 3. COMPOSITION/INFORMATION ON THE INGREDIENTS

CHEMICAL ENTITY :	CAS NO :	PROPORTION :
Toluene	108-88-3	10-30%
Methyl Ethyl Ketone (MEK)	78-93-3	10-30%
Pentane, 2-methyl-	107-83-5	30-60%

SECTION 4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia 13 11 26) or a doctor.

Ingestion: If swallowed, **do not** induce vomiting. Seek medical advice.

Eye: Hold eyes open, flood with water for at least 15 minutes. Seek medical advice.

Skin: Remove contaminated clothing & wash skin thoroughly.

Inhalation: Remove affected person from contaminated area. Apply artificial respiration if not breathing. Urgently seek medical advice.

Advice to doctor: Treat symptomatically

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Foam, dry chemical or carbon dioxide extinguishers

Hazards from combustion products: Carbon dioxide and carbon monoxide

Precautions for fire fighters and special protective equipment: Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3[Y]E

SECTION 6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: Extinguish or remove all sources of ignition. Clear area of all unprotected personnel. Wear appropriate protection equipment (refer Section 8)

Methods and materials for containment and cleanup: Shut off source of leak if safe to do so. Dyke & contain spill with sand or earth. Prevent runoff into drains & waterways. Place used absorbent in clearly labelled containers for disposal as per statutory regulations.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Highly flammable. Do not open near sources of heat, naked flames or sparks. No smoking. Keep container closed. Take precautions against static electricity discharges. Ensure equipment & fittings are flame proofed.

Conditions for safe storage: Store in a cool, dry, ventilated place. Store away from heat, naked flames, sparks and strong oxidising agents. Keep away from ignition sources.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National exposure standards:

n-Hexane :	TWA 20ppm, 72 mg/m ³	
n-pentane :	TWA 600ppm, 1770 mg/m ³	STEL 750ppm, 2210 mg/m ³
Toluene :	TWA 50ppm, 191 mg/m ³	STEL 150ppm, 574 mg/m ³
MEK :	TWA 150ppm, 445 mg/m ³	STEL 300ppm, 890 mg/m ³

TWA is the average airborne concentration in an 8 hour day for a five day working week.

STEL is the maximum allowable exposure concentration over a 15 minute period.

Engineering controls: Use in a well ventilated area only. Maintain air levels below the Exposure Limit. If mechanical ventilation used it must be explosion proof. If air levels exceed Exposure Limit, respiratory protection required.

Personal protective equipment: Avoid contact with the skin & eyes and avoid breathing vapours, fumes or spray mists. Always use safety glasses, protective PVC rubber gloves, long sleeves, trousers and safety boots.

If ventilation is inadequate use an air supplied respirator or organic vapour cartridge mask (complying with AS1715 & 1716)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Thin yellow liquid. Typical hydrocarbons liquid odour.
Boiling point :	55-111°C
Vapour pressure :	211 mmHg @ 25°C (2-Methylpentane)
Specific gravity :	approx. 0.82 g/cm ³
Flash point :	-29°C (2 Methylpentane)
Flammability limits :	(toluene) lower : 1.2%v.v. Upper : 7.1%v.v.
Other properties :	immiscible in water

SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions

Conditions to avoid: Sources of heat and ignition, open flames

Incompatible materials: Strong oxidising agents

Hazardous decomposition products: Oxides of carbon and smoke may be formed during combustion.

Hazardous reactions: Polymerisation will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Swallowed : Harmful if swallowed. Tends to break up into a foam if the patient vomits. Upon aspiration into the lungs, chemical pneumonitis may develop.

Skin : Mildly irritating to skin. Frequent & prolonged contact can cause dermatitis.

Eye : Mildly irritating to eyes.

Inhaled : Inhalation may cause irritation to respiratory system. Prolonged exposure may cause somnolence & narcosis.

CHRONIC EFFECTS

There is evidence of potentially irreversible damage to the peripheral nervous system, particularly arms and legs. People with pre-existing liver or kidney dysfunction should limit exposure to this product.

The effects of MEK in combination with n-hexane are greatly increased. This means that the effects suffered by ingestion or inhalation will be increased, or experienced more quickly.

Toluene: Oral LD₅₀: Oral (rat): 636 mg/kg
 Dermal TC_{LO}: Skin (rabbit) LD₅₀: 14100 µL/kg

MEK: Oral LD₅₀: Oral (rat): 2737 mg/kg
 Dermal TC_{LO}: 100ppm (inhalation, human)

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Pentane, 2-methyl- : No data available

Toluene: Fish Toxicity (rainbow trout, goldfish, bluegill): LC₅₀ (96hr): Goldfish 2400000 µg/L
 Daphnia Magna EC₅₀ (24hr): LC₅₀: > 520000 µg/L
 Blue-green algae (Toxicity threshold 7-8 days): LO_{EC}: 120000 µg/L
 Green algae (Toxicity threshold 7-8 days): LO_{EC}: 4300000 µg/L

MEK: Fish Toxicity (rainbow trout, goldfish, bluegill): LC₅₀ (96hr): Rainbow Trout EC₅₀: 7250 µg/L
 Daphnia Magna EC₅₀ (24hr): EC₅₀: 6000 µg/L
 Blue-green algae (Toxicity threshold 7-8 days): no data available
 Green algae (Toxicity threshold 7-8 days): EC₅₀: 400000 µg/L

Persistence/degradability: Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.

Mobility: Floats on water. Adsorbs to soil and has low mobility.

Bioaccumulation: No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Drain containers and vent away from ignition sources as residue may cause an explosion hazard. Disposal of material and containers should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

	Road and Rail Transport	Marine Transport	Air Transport
UN No.	1133	1133	1133
Proper shipping name	ADHESIVE containing flammable liquid	ADHESIVE containing flammable liquid	ADHESIVE containing flammable liquid
DG Class	3	3	3
Sub. Risk	none	none	None
Packaging group	II	II	II
Hazchem	3[Y]E		



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Dangerous goods segregation: Classified as Dangerous Goods by the Australian Dangerous Goods (ADG) Code for transport. Refer to ADG code for segregation requirements.

SECTION 15. REGULATORY INFORMATION

Poisons schedule (SUSDP): S5

AICS : All ingredients of this material are listed on the Australian Inventory of Chemical Substance (AICS).

SECTION 16. OTHER INFORMATION

Reason for issue: Revised to GHS requirements.

References: Supplier material safety data sheets

Version No. 2

Previous issue: May 2015

This MSDS should be made available to anybody that handles the product. The information is based on our current knowledge and describes health and safety requirements only.