The Nail Shop – Brush on Activator MSDS Summary Information
For further information: Please refer to the full MSDS

Issue: August 2014

PRODUCT: The Nail Shop Brush On Activator

Other Names: Resin activator

Uses: Curing brush on nail resins

Pack Sizes: 15ml

UN No.	1090
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	II
Hazchem	2[Y]E
Poison Schedule	5

Hazardous Nature:	This product is classified as hazardous under SafeWork Australia criteria
Exposure Standards:	TWA (Acetone): 1185 mg/m3 (500 ppm). Vapour Threshold (Acetone): 100 -140 ppm: STEL(Acetone): 2375 mg/m3 (1000 ppm)

Physical Characteristics (Typical) — Section 9 of MSDS

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	77
Flash Point (°C):	20
Specific Gravity/ Density (g/ml @ 15°C):	Not determined
Chemical Stability:	Stable under normal conditions of use
Reactivity:	Carbon oxides on burning

Product Ingredients — Section 3 of MSDS

Acetone	67-64-1	> 70
Ethyl Acetate	141-78-6	< 30
N,N Dimethyl-p-Toluidine	99-97-8	<1
Non hazardous components		<1

For further ingredients information, please refer to the full MSDS.

Risk Phrases — Section 2 of MSDS

R 11	Highly flammable	R 36	Irritating to eyes
R 66	Repeated exposure may cause skin dryness or cracking	R 67	Vapours may cause drowsiness and dizziness

For further Risk and Safety information, please refer to the full MSDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION

Product Name: **The Nail Shop Brush On Activator**
Other Names: Resin activator, Amine + solvent system
Chemical Family: Ketones/amines
Molecular formula:
Recommended Use: Curing brush on nail resin systems
Supplier: The Nail Shop
ABN: 71 365 073 683
Street Address: 22 Pleasant Grove, Holden Hill SA 5088
Telephone: 0416 157087

2. HAZARDS IDENTIFICATION

Health Hazard Classification

This product is classified as hazardous under SafeWork Australia criteria

Hazard Category

Xi: Irritant

Risk Phrases

R 11	Highly flammable	R 36	Irritating to eyes
R 66	Repeated exposure may cause skin dryness or cracking	R 67	Vapours may cause drowsiness and dizziness

Safety Phrases

S 2	Keep out of reach of children	S 9	Keep container in a well ventilated place
S 16	Keep away from sources of ignition - No smoking	S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Dangerous Goods Classification

3

Poisons Schedule

5

3. COMPOSITION: Information on Ingredients

Acetone **67-64-1**

Chemical Ingredient	CAS No.	Proportion (%v/v)
Acetone	67-64-1	> 99.5
Water	7732-18-5	< 0.5

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Water fog or fine spray mist

Hazards from combustion products

Carbon dioxide, carbon monoxide

Precautions for fire fighters and special protective equipment

Fully self-contained breathing aparatus, overalls, and safety boots

Hazchem Code:

3[Y]E

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.

- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for safe handling

This product is Flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are combustible. This product will fuel a fire in progress.

Incompatible materials

Painted surfaces, natural rubber, polystyrene, EDPM, neoprene

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA) for this product is: 1185 mg/m3 (500 ppm). Vapour Threshold: 100 -140 ppm, which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: 2375 mg/m3 (1000 ppm), which is the maximum allowable exposure concentration at any time.

Biological limit values

None established

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	56
Flash Point	°C	-17
Density @ 15°C	g/ml	0.792
Vapour Pressure @ 20°C	kPa	180 mmHg
Explosive Limits (LEL – UEL)	%	2.2 – 13.0
Vapour Density @ 20°C	kPa	Not available
Autoignition Temperature	°C	465
Viscosity @ 20°C	cSt	Not available
Percent Volatiles	%	100%
Solubility with Water	% w/w	Miscible with Water

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of use

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

Carbon oxides on burning

Hazardous reactions

Strong oxidising agents, strong alkalis and strong mineral acids and bromine.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

This material will cause irritation to the throat, trachea and respiratory tract. It may cause nausea. Swallowing large amounts will have a narcotic effect: headaches, dizziness, euphoria, loss of appetite and possibly loss of consciousness. Vomiting may cause the product to be aspirated to the lungs resulting in chemical pneumonitis.

Eye Contact

Liquid may cause moderate to severe eye irritation and corneal damage. Most subjects exposed to vapour concentrations of 500 - 1000 ppm experience irritation to the eyes.

Skin Contact

Brief contact may cause mild irritation. Prolonged or repeated exposure may cause defatting resulting in dryness or cracking of the skin (irritant contact dermatitis). Due to its low toxicity and high volatility, this product is unlikely to be absorbed through the skin in harmful amounts unless evaporation is prevented.

Inhalation

Vapour concentrations above 500 ppm are irritating to the nose and throat. High vapour concentrations (above 1000 ppm) result in narcotic effects including possilble headaches, dizziness, loss of coordination, nausea, loss of appetite and possibly loss of consciousness.

Chronic Effects

Repeated or prolonged skin contqact with the liquid may cause irritant contact dermatitis. A study of 800 workers occupationally exposed to these vapours (600 - 2150 ppm) over an 18 year period revealed no significant adverse health effects compared with unexposed workers.

Other Health Effects Information

Exposure to this product potentiates (greatly enhances) the liver and kidney toxicity of chlorinated hydrocarbon solvents such as trichloroethylene and chloroform. Fasting and diabetes increases the normal levels of acetone in the body. Dieters and diabetics exposed to levels of acetone may feel overexposure effects at lower levels of occupational exposure. Exposure to high concentrations of acetone may aggravated pre-existing skin, respiratory, blood, liver, kidney and reproductive disorders in humans.

Toxicological Information

Oral: 5.8 - 8.4 g/kg (rat); dermal: 20 g/kg (rabbit).

Inhalation: LC50: 32000 ppm for 4 hours (rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC_{50}(96hr): 5000 - 13000 mg/L
Daphnia Magna EC_{50} (24 hr):	> 10000 mg/L
Daphnia Magna EC_{50} (48 hr):	13500 mg/L
Blue-green algae (Toxicity threshold 7-8 days):	530 mg/L
Green algae (Toxicity threshold 7-8 days):	7500 mg/L

Persistence/ degradability

This product can degrade rapidly in air. This substance is expected to be removed in wastewater treatment. Based upon data for a similar components or estimated data, this product is expected to biodegrade rapidly and be 'readily' biodegradable according to OECD guidelines.

Mobility

In soil, this product will evaporate and leach readily in most types of soil. Acetone has a negligible tendency to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1090	UN No.	1090	UN No.	1090
Proper Shipping Name	Acetone	Proper Shipping Name	Acetone	Proper Shipping Name	Acetone
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	II	Pack Group	II	Pack Group	II
Hazchem	2[Y]E				

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group II. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS

Status: Listed

Poisons Schedule: 5

16. OTHER INFORMATION

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

References:

- Supplier Material Safety Data Sheets
- *Sax's Dangerous Properties of Industrial Materials*, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact The Nail Shop