

The Laminex Group
90 - 94 Tram Road
DONCASTER VIC 3108
Telephone: 03 9848 4811
Facsimile: 03 9848 8158

Date last updated: 22/07/2003

MATERIAL SAFETY DATA SHEET NO. 502

STATEMENT OF HAZARDOUS NATURE: This material is classified as a hazardous substance according to the criteria of NOHSC and a Dangerous Good by the criteria of the ADG Code.

TRADE ESSENTIALS - BRUSHABLE CONTACT ADHESIVE - 440T

IMPORTANT NOTICE: This Material Safety Data Sheet (MSDS) is issued by The Laminex Group in accordance with NOHSC Guidelines. As such, the information contained herein must not be altered, deleted or added to. The Laminex Group will issue a new MSDS when there is a change in product specifications and/or NOHSC guidelines / regulations. The Laminex Group will not accept any responsibility for any changes made to its MSDS in content by any other person.

COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Entity	CAS No.	Proportion	R phrase
<u>Hazardous constituents</u>			
Acetone	67-64-1	10 - 30%	R11, R36
n-Hexane	110-54-3	<5%	R11, R20, R48, R65, R67
Hexane mixed isomers		30-60%	R11, R38
Toluene	108-88-3	10-30%	R11, R20, R65,
Non hazardous materials		up to 100%	

No other hazardous materials are present in this product at concentrations above the cut off levels as Noted in the List of Designated Hazardous Substances, [NOHSC: 10005 (1999)] or as defined in the Approved Criteria for Classifying Hazardous Substances [NOHSC: 10008 (1999)].

AICS status: All components of the finished product are listed on the AICS

HAZARDS IDENTIFICATION

Emergency Overview: Highly flammable, harmful by inhalation, ingestion and by skin and eye contact.

Acute:

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

Eye: Irritating to the eye

Skin: Mildly irritating to the skin. Frequent or prolonged contact can cause skin complaints such as dermatitis

Inhalation: Irritating to the respiratory system. Prolonged exposure to vapours may cause headaches, impairment of judgement, central nervous system depression which in extreme cases may lead to unconsciousness or death.

Chronic:

Reports exist related to chronic toluene poisoning which indicate bone marrow and liver damage.

FIRST AID MEASURES

Swallowed: Do not induce vomiting. Give 1 - 2 glasses of water and obtain medical assistance. Should the patient vomit, maintain a clear airway until medical assistance is obtained

Eye: Flush with water for 15 minutes. It is advisable to obtain medical advice concerning any eye injury.

Skin: Hose down with water before removing clothes due to possibility of static discharging igniting vapour. Wash affected areas with soap and water thoroughly. Allow clothing to thoroughly air dry then launder before re-use. If symptoms persist, seek medical advice.

Inhaled: Carefully remove persons to fresh air, avoid becoming affected yourself. If the patient is severely affected obtain medical assistance. If the person stops breathing apply artificial respiration and other first aid techniques as required until medical assistance arrives

Advice to Doctor

Oral: Gastrointestinal irritation, nausea, vomiting and cramping. CNS depression ranging from mild headache to anaesthesia and coma. Pulmonary irritation secondary to exhalation of solvent. Lavage with cuffed tube if a large quantity is ingested. Aspiration is the main danger. Enforce bed rest and observe carefully. Observe for 24 hours for chemical pneumonitis. Longer term medical surveillance may be necessary. Maintain airway and vital functions

Inhalation: CNS depression characterised by headache and dizziness which in extreme cases can lead to unconsciousness and death.

FIRE FIGHTING MEASURES

Fire / Explosion Hazard: Product is flammable and does represent a fire and explosion hazard. Excessively heated sealed containers may rupture explosively.

Sources of Ignition

Advice: Isolate from of sources of heat, naked flames and sparks, including static discharges. Prevent build up of flammable vapours. Vapour and air mixture may ignite explosively

Dangerous

Decomposition: Carbon Dioxide, carbon monoxide and other unidentified thermal decomposition products

Fire Fighting

Recommendations: Use foam, carbon dioxide or dry chemical

ACCIDENTAL RELEASE MEASURES

Wear rubber gloves and goggles in addition to respiratory protection for protection against splashes and vapours. Extinguish all ignition sources. Dam and recover. Prevent entry into drainage systems, rivers, waterways etc. Collect with absorbent materials such as sand, earth or appropriate commercial absorbent. Shovel up with non-sparking tools. Place into suitable containers. Empty containers may contain product residue. Follow safety procedures until container has been cleaned

HANDLING AND STORAGE

Store on wooden pallet. Store between 0° and 30°C. Should recommended maximum storage temperature be exceeded, cool sealed container under running water for 30 minutes before use. Excessively heated sealed drums may rupture explosively.

Keep away from heat, naked flames or sparks including static discharges. Use appropriate earthing techniques when transferring liquids from one container to another.

Store away from oxidising agents. Keep containers closed at all times when not in use

DANGEROUS GOODS CLASS / SUBSIDIARY RISK: Class 3 Flammable Liquid Packaging Group II.

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure

This material contains the following materials for which exposure limits have been set by NOHSC Australia as listed in the "National Exposure Standards {NOHSC: 3008 (1995)}" and Amendments to Adopted National "Exposure Standards for Atmospheric Contaminants in the Occupational Environment (*Source A Updates Batch 1*) 2001 and (*Source A Updates Batch 2*) 2002 as follows:

Acetone	67-64-1	TWA 500 ppm STEL 1000 ppm
Toluene	108-88-3	TWA 50 ppm STEL 150 ppm
n-hexane	110-54-3	TWA 20 ppm STEL Not noted
Other isomers of hexane		TWA 500 ppm STEL 1000 ppm

Ventilation: Provide explosion proof ventilation sufficient to maintain exposure levels below the listed exposure limits

Personal Protection:

Respiratory type (AS1716):

Organic vapour mask if exposed to mist or vapours at up to 10 times the exposure limit. Above this level use air supplied or self contained breathing apparatus.

Glove Type: Impervious gloves should be worn to prevent skin contact.
Consult industrial glove supplier for a suitable glove

Eye: Goggles or face shields to avoid splashes

Clothing: Sufficient to avoid skin contact.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to amber liquid

Boiling point, °C:	approx. 55
Vapour Pressure@ 760 mm Hg at 25 °C:	Not known
Solubility in Water, g/l:	Immiscible
Specific Gravity: kg /litre	Approx. 0.82
Flash Point, °C:	-26
Flammability Limits, % Upper:	7.4% v/v
Lower	1.1% v/v
Evaporation Rate (BuAc = 1):	Not Determined
Other Data:	None noted

Major recommended usage: Specialised applications including solvent based adhesive

Method of application: Mechanical or hand tool

STABILITY AND REACTIVITY

Reactivity: Stable at normal temperature and pressures

TOXICOLOGICAL INFORMATION

Toluene:-

Oral Rat	LD50 5000 mg / kg
Skin Rabbit	LD50 12,124 mg / kg

Acetone:-

Oral Rat	LD50 5,800 mg / kg
Skin Rabbit, adult	LD50 20 g / kg

n-hexane:-

Oral rat	LD50 28,710 mg / kg
Inhalation Human	TCLo 190ppm / 8W: Peripheral nervous system effects

ECOLOGICAL INFORMATION

No data available for the product. Do not allow to enter the environment. Waste material should be collected and disposed of according to the relevant Local / State or Federal regulations.

DISPOSAL

Refer to Land Waste Management Authority

TRANSPORT INFORMATION

This material is a Class 3 Flammable Liquid according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

Proper Shipping Name:	Adhesive containing Flammable Liquid (i) immiscible in water
UN Number:	1133
Dangerous Goods Class	3.1
Subsidiary Risk:	Not Applicable
HAZCHEM Code:	3[Y]E
Poisons Schedule:	5

REGULATORY INFORMATION

Hazard Classification: Harmful Xn

Risk Phrases	R11	Highly flammable
	R20	Harmful by inhalation
	R36	Irritating to eyes
	R38	Irritating to skin
	R65	Harmful: may cause lung damage if swallowed
	R67	Vapours may cause drowsiness and dizziness

Safety Phrases	S 9	Keep container in well ventilated place
	S16	Keep away from sources of ignition. No smoking
	S24	Avoid contact with skin
	S25	Avoid contact with eyes
	S29	Do not empty into drains
	S33	Take precautionary measures against static discharge
	S51	Use only in well ventilated areas

OTHER INFORMATION

Contact Point: National Starch and Chemical Pty Ltd
Stanton Road,
SEVEN HILLS. NSW. 2147

TITLE: SHE Manager
TELEPHONE: 02 9624 6022

PREPARED BY: Margaret Teleki
TITLE: SHE Support
TELEPHONE: 02 9624 6022

Whilst the information contained in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.