



MATERIAL SAFETY DATA SHEET FOR: RAKOLL® K650/P2

1 of 8

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

SUPPLIER Company: H. B. Fuller Company
Address: 16-20 Red Gum Drive Dandenong South VIC 3175
Telephone: (03) 9797 6222
Emergency Telephone No: 1800 033 111

PRODUCT **Product Name:** Rakoll K650 P/2
Other Names: Hot melt adhesive

Manufacturer's Code: None

USE Universal hot melt adhesive designed and approved for use in hot melt cartridge machines. The adhesive is applied in an industrial environment with purpose built machinery.

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION **NOHSC Classification:** Non-Hazardous Substance
ADG Classification: Non-Dangerous Goods
SUSMP Classification: Not scheduled

RISK PHRASES None

SAFETY PHRASES None

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>MIXTURE</u>	CHEMICAL ENTITY	CAS No	PROPORTION
	Hydrocarbon resin	Proprietary	30 - < 60%
	Ethyl vinyl acetate copolymer	24937-78-8	30 - < 60%
	Paraffin wax/hydrocarbon wax	Not available	10 - < 30%
	Other ingredients determined not to be hazardous	Not applicable	< 10%

4. FIRST AID MEASURES

FIRST AID **Swallowed:** Do NOT induce vomiting. Rinse mouth thoroughly with water. If casualty is alert and conscious give plenty of water to drink. Seek medical advice.

Eyes: If contact with solid product occurs, irrigate eye with copious amounts of water to remove adhesive particles. If contact with the molten material occurs,

MATERIAL SAFETY DATA SHEET FOR: RAKOLL® K650/P2

2 of 8

irrigate with copious amounts of water and SEEK IMMEDIATE MEDICAL ATTENTION.

Skin: Wash affected area with soap and water if contact with the solid form occurs. If contact with molten material occurs, immerse contact area in cold, clean water immediately. Do not attempt to remove set product. Cover contact area with wet compresses and take casualty to a doctor immediately.

Inhaled: An inhalation hazard only if product is molten. Remove victim to fresh air. Seek medical advice if adverse symptoms, such as coughing, breathing difficulties or burning sensations in the respiratory tract develop. If breathing has stopped, apply artificial respiration.

First Aid Facilities: Burns creme, bandages, eyewash station, emergency showers in the vicinity where exposure is likely to occur.

ADVICE TO
DOCTOR

No specific antidote. Provide supportive care. Treatment based on judgement of the doctor in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

EXTINGUISHING
MEDIA

Use alcohol resistant foam, dry chemical powder or carbon dioxide. Avoid using water jet on molten material as it may cause splattering and spreading of the fire.

HAZARDOUS
COMBUSTION
PRODUCTS

Oxides of carbon, oxides of nitrogen, ethanoic acid, noxious fumes and other gaseous polymer fractions having unknown adverse health effects.

PRECAUTIONS FOR
FIRE FIGHTERS

Fight fire from a safe distance. Mixture will give off dense smoke and flammable vapours in an oxygen depleted atmosphere. Wear full protective equipment for a chemical fire, including a self-contained breathing apparatus. Avoid using water on molten material to reduce splattering and spreading of the fire. Prevent fire-fighting medium from entering drains or waterways.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY
PROCEDURES

Isolate hazard area, increase ventilation and restrict access. Remove all sources of ignition. If the molten substance is spilled, allow it to cool and cut it into slabs of a size that is easily handled.

CLEAN UP
PROCEDURE

Solid Material: Sweep, pick up or scoop up preparation and place it in an appropriate container. Clearly label the container to ensure proper disposal.



Molten Material: Wear appropriate personal protection equipment (See Section 8) and contain spill. Allow preparation to cool then cut it to easily handleable pieces and treat them as described under the “Solid Material” heading.

7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING Practice sound industrial hygiene. Avoid contact with mixture and inhaling of vapours or fumes emanating from the molten preparation. Use only in a well ventilated area. Wash hands thoroughly after handling. Guard against static build-up.

STORAGE Store in a cool, dry, well ventilated place. Avoid exposure to direct sunlight or sources of heat. Store away from incompatible materials (see Section 10). Protect packaging against physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS An Australian Exposure Standard for this mixture has not been set by NOHSC. The inhalation hazard for this mixture in a solid state is very low. However the mixture contains waxes, calcium carbonate and trace amounts of vinyl acetate monomer, the exposure standards of which have been set by NOHSC as shown below. The nature and composition of the vapours, gases and mists given off the heated material are unknown and hence an atmospheric exposure limit can not be given for them.

Exposure Standard [NOHSC:1003(2004)]	TWA	STEL
Vinyl acetate monomer	10 ppm	20 ppm
Paraffin wax fumes	2 mg/m ³	No data
Calcium carbonate	10 mg/m ³	No data

BIOLOGICAL LIMIT VALUES Not applicable

ENGINEERING CONTROLS The solid material requires only good natural ventilation. The molten material needs good general flameproof mechanical dilution ventilation augmented with flameproof extraction ventilation at the source of vapour, gas or fume emanation. Ensure that ventilation is sufficient to maintain exposure levels not just only below exposure standards but as low as practicable.



MATERIAL SAFETY DATA SHEET FOR: RAKOLL® K650/P2

4 of 8

PERSONAL
PROTECTION
EQUIPMENT

Use personal protective equipment that minimizes skin and eye contact with the solid substance and vapour, fumes or gas inhalation emanating from the molten substance. The type of protective equipment to be used depends largely the volume and the manner in which the substance is used. To ensure proper protection for any given situation, seek guidance from the following sources: Protective clothing – AS 2919; gloves – AS 2161; eye protection – AS 1337; respiratory protection – AS 1715; feet protection – AS 2210. The suitability of each PPE for use when handling this mixture should then be ascertained with the respective PPE suppliers.

Under condition of adequate ventilation and ordinary use, only nitrile rubber gloves are needed when handling the solid preparation. When using the molten preparation, wear safety glasses with side shields, thick, long sleeved nitrile rubber gloves, long sleeved overalls and work boots. In the event of a substantial spill of molten material or if working in confined spaces, or if vapours, fumes or gases are generated and their airborne concentration is unknown wear, in the addition to the above, a full-face AS/NZ 1716 compliant cartridge type respirator with an organic vapour filter (For selection guidance see AS 1715). In the presence of fumes, a particulate filter should be fitted in conjunction with the organic filter. If the normal, ordinary work environment necessitates the use of respiratory protection, and the respirator is the sole means of respiratory protection, use a full-face air supplied respirator.

9. PHYSICAL AND CHEMICAL PROPERTIESPHYSICAL
DESCRIPTION &
PROPERTIES

Appearance: Solid
Odour: Characteristic
pH: Not applicable
Vapour Pressure: Not available
Vapour Density: Not available
Boiling Point: Not established
Softening Point: ca. 97°C
Solubility in Water: Insoluble
Specific Gravity: ca. 1.39
Flashpoint: > 250°C
Explosive Limits (%v/v): Not applicable
Ignition Temperature: > 250°C
VOC content (Californian South coast air quality management rule 1168)
0g / l



OTHER
PROPERTIES

Decomposition Temperature: 250°C

10. STABILITY AND REACTIVITY

CHEMICAL
STABILITY

This material is stable under normal ambient and anticipated storage and handling conditions.

CONDITIONS
TO AVOID

Temperatures in excess of the recommended processing temperatures.
Temperatures in excess of 250°C

INCOMPATIBLE
MATERIALS

Strong oxidising agents.

HAZARDOUS
DECOMPOSITION
PRODUCTS

Oxides of carbon, oxides of nitrogen, ethanoic acid, noxious fumes and other gaseous polymer fractions.

HAZARDOUS
REACTIONS

Hazardous polymerization will not occur. At temperatures above 250°C, depolymerisation and the release of starting monomers can arise.

11. TOXICOLOGICAL INFORMATION

Little information is available for this particular mixture. The toxicological information given below is based on data of similar preparations.

ACUTE
HEALTH
EFFECTS

Swallowed: Not hazardous in normal industrial use. Ingestion of small amounts of solid material is not expected to cause harm. Ingestion of molten material will cause thermal burns.

Eyes: No health effects due to the solid material, though rubbing when the eye contains small adhesive particles may cause corneal abrasion. When molten, vapours and fumes may cause irritation. When molten direct contact will cause thermal burns.

Skin: No known effects due to the solid material. Direct contact will cause thermal burns if the material is in its molten state.



MATERIAL SAFETY DATA SHEET FOR: RAKOLL® K650/P2

Inhaled: No known effects due to the solid material. When molten, vapours or fumes may cause irritation of the nose, throat and respiratory tract, headaches, nausea and vomiting.

CHRONIC
HEALTH
EFFECTS

Prolonged or frequent skin contact may lead to irritant contact dermatitis in some sensitive individuals due to the presence of paraffin wax. None of the components of this mixture has been listed as a sensitizer or mutagen.

12. ECOLOGICAL INFORMATION

The ecological effect of the mixture as a whole has not been tested. Given that all components are locked in a polymeric matrix and the bio-availability of the ingredients are not known, the ecological effects of the pure components cannot be reasonably extrapolated and hence no valid ecological data without actually testing this mixture can be given.

13. DISPOSAL CONSIDERATIONS

This product is a prescribed waste and may only be disposed of in accordance with applicable State and local regulations. These regulations vary from jurisdiction to jurisdiction and hence the user is counselled to seek advice from the local authority and classify the waste before considering disposal. The disposal information given below is a general guide and does not replace the requirement of the local regulations.

DISPOSAL

If possible recycle, otherwise dispose strictly in accordance with local industrial waste or environmental protection regulations. This substance may, if permitted by local authorities, be disposed of in an approved incineration facility or be considered for landfill.

SPECIAL
PRECAUTIONS

Do not allow this material to contaminate soil, sewerage systems, surface or ground water.

When large amounts of this product need to be disposed of the services of a registered, professional waste disposal organisation is highly recommended.

14. TRANSPORT INFORMATION

This mixture has not been classified as Dangerous Goods. It is not subject to the following transport regulations: ADG, IMDG/IMO, ICAO/IATA.

**15. REGULATORY INFORMATION**

AICS All components of this mixture are listed in AICS

SUSDP Not a scheduled poison

16. OTHER INFORMATION

The current IARC list of its monographs on carcinogens places vinyl acetate monomer in Group 2B
"The agent is possibly carcinogenic to humans".

This mixture contains a trace amount of vinyl acetate monomer. In the mixture "as is" this amount is below the cut-off limits promulgated by NOHSC. The mixture therefore represent only a slight health risk when used as directed.

MSDS **Issue Number:** 03
Date of Issue: October 2012
Replaces: September 2007
Changes made to the previous issue: VOC data updation

ACRONYMS **ADG Code:** Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS: Australian Inventory of Chemical Substances.
CAS Number: Chemical Abstracts Service Registry Number
CNS: Central nervous system
DG: Dangerous Goods
Hazchem Code: An emergency action code of numbers and letters, which gives information to emergency services.
IARC: International Agency for Research on Cancer.
N.O.S.: Not otherwise specified.
NOHSC: National Health and Safety Commission.
PPE: Personal protection equipment.
R-Phrases: Risk Phrases.
S-Phrases: Safety Phrases.
SUSMP: Standard for the Uniform Scheduling of Drugs and Poisons.
UN Number: United Nations Number



MATERIAL SAFETY DATA SHEET FOR: RAKOLL® K650/P2

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular, how to safely handle and use the product in the workplace. Since H.B. Fuller Company Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use then product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request
