Infosafe No™ 1CH9N Issue Date : December 2012 RE-ISSUED by SIGMAALD

Product Name **PARAFFIN WAX (Slabs, flakes, pellets)**

Not classified as hazardous

1. Identification

GHS Product Identifier PARAFFIN WAX (Slabs, flakes, pellets)

Company Name CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

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SA 5013 Australia

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Recommended use of the chemical and restrictions on use Candles; paper coating; protective sealant for food products, beverages, etc.; glass-cleaning preparations; hot-melt carpet backing; biodegradable mulch (hot melt-coated paper); impregnating matches; lubricants; cosmetics; wax baths for beauty and therapy purposes; emollient (moisturiser), in dermatology; crayons; surgery; floor polishes; photography; antifrothing agent in sugar refining; packing tobacco products; chewing gum base; electrical insulation; investment casting; anti-caking agent, moisture repellent, and dustbinding coatings for fertilizers; agent for preparation of specimens for histology; solid propellant for hybrid rocket motors; component of waxes for surfboards, skis and snowboards, friction-reducer, for use on handrails and cement ledges, commonly used in skateboarding; forensics; anti-ozonant agent: blends of paraffin and micro waxes are used in rubber compounds to prevent cracking of the rubber; mechanical thermostats and actuators, as an expansion medium for activating such devices; thickening agent; food additive, a glazing agent with E number E905; used in industries such as the tyre and rubber, adhesives, corrugated board, and laboratory reagent.

Other Names

Name	Product Code
PARAFFIN WAX Pellets (Beaded) MP 55°C	PT200
PARAFFIN WAX Microcrystalline MP 80°C	PT030
PARAFFIN WAX Slabs MP 55°C	PT046

Other Information EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture Not classified as hazardous according to the criteria of the NOHSC.
Fumes from heated product are classified as hazardous according to the criteria of the NOHSC.
Not classified as dangerous goods according to the ADG Code.
Heated product (>100 °C) is classified as dangerous goods according to the ADG Code.

3. Composition/information on ingredients

Chemical Characterization Solid

Information on Composition Paraffin wax: Consists predominantly of straight chain hydrocarbons having carbon numbers predominantly greater than C20.
Microcrystalline wax: Consists predominantly of saturated straight and branched chain hydrocarbons predominantly greater than C35.

Ingredients

Name	CAS	Proportion	Hazard Symbol	Risk Phrase

Paraffin wax	8002-74-2	0-100 %
Microcrystalline wax	63231-60-7	0-100 %

4. First-aid measures

Inhalation Remove from exposure, rest and keep warm. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen. If irritation develops and persists, seek immediate medical attention.

Ingestion Rinse mouth thoroughly with water immediately. Give plenty of water to drink. Never give anything by mouth to an unconscious person. If swallowed, do NOT induce vomiting. Seek medical attention in severe cases.

Skin Wash affected area thoroughly with copious amounts of running water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation develops or persists. If molten material should contact the skin and adhere; cool quickly with running water - do not attempt to remove. Wrap loosely with wet towel or bandage. Seek urgent medical assistance.

Eye contact If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Seek medical attention.

First Aid Facilities Eye wash and safety shower, plus normal washroom facilities nearby.

Advice to Doctor Treat symptomatically and supportively.

5. Fire-fighting measures

Hazards from Combustion Products Highly toxic and/or irritating fumes and smoke including carbon monoxide, carbon dioxide and other products such as aldehydes and ketones depending on conditions of oxidation.

Specific Methods Small fire: Use foam, dry chemical, CO2 or water spray.
Large fire: Use foam, fog or water spray. Do not use water jets.
If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical May burn but do not ignite readily. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.

Precautions in connection with Fire SCBA and structural firefighter's uniform may provide limited protection.

6. Accidental release measures

Spills & Disposal Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains, or confined areas. Water spray may be used to knock down or divert vapour clouds. Prevent dust cloud. Avoid inhalation of asbestos dust.
SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

7. Handling and storage

Precautions for Safe Handling Solid Product: Avoid inhalation of dust. Avoid contact with skin and eyes. Avoid generating dust. Keep container tightly closed. Use with adequate ventilation. Wear appropriate protective equipment. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet. Keep away from heat and all sources of ignition. Ground all equipment containing material. Keep away from incompatibles such as oxidizing agents. Avoid exposure to sunlight. Containers of this material may be hazardous and pose a fire risk when empty since they retain product residues (dust, solids); evaporate the residue under a fume hood and observe all warnings and precautions listed for the product.
As Hot Molten Liquid: Wear protective equipment. Keep away from ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. When kept in molten state, inert gas blanketing may be used to avoid material degradation.

Conditions for safe storage, including any incompatabilities Solid Product: Suitable for any general chemical storage area. Store in labelled, tightly closed containers, in a cool, dry, well-ventilated area away from sources of heat or ignition, direct sunlight, moisture, water and incompatible materials, strong oxidising agents and strong caustics. Keep

	containers closed and securely sealed when not in use. Protect against physical damage. Have appropriate fire extinguishers available in and near the storage area. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Hot Molten Product: Store at the minimum temperature to maintain in a molten state. Take care not to allow the product to solidify in equipment, as it may require significant time, heat and difficulty to reliquefy it. Inert gas blanketing may be used to avoid material degradation.
Corrosiveness	Not corrosive.
Storage Regulations	If stored at over 100 °C this product is a Class 9 Dangerous Good, UN 3257, ELEVATED TEMPERATURE LIQUID, Packing Group III, Hazchem 2W for bulk. The Dangerous Goods (Storage & Handling) Regulations in your State or Territory must be applied: Refer Australian Standard AS 4681:2000 'The storage and handling of Class 9 (miscellaneous) dangerous goods and articles'.
Storage Temperatures	Store at room temperature (15 to 25 °C recommended).

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Paraffin wax			2		Paraffin wax (fume)

Other Exposure Information	A time weighted average (TWA) has been established for Paraffin wax (fume) (Worksafe Aust) of 2 mg/m³. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.
Appropriate engineering controls	Provide sufficient ventilation to ensure that the working environment is below the TWA (time weighted average). Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flame proof exhaust ventilation system is required. Refer to AS 1940-The storage and handling of flammable and combustible liquids and AS 2430-Explosive gas atmospheres for further information concerning ventilation requirements.
Respiratory Protection	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
Eye Protection	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.
Hand Protection	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Good: NR latex, vinyl, nitrile, neoprene gloves.
Body Protection	Clean clothing or protective clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Solid
Appearance	Colourless to white to dark amber waxy solid (slabs, flakes, pellets) at room temperature. Can be transported as hot molten liquid.
Odour	Odourless to weak, characteristic petroleum odour.
Melting Point	45 - 95 °C

Boiling Point	>300 °C; 322 °C @ 760 mmHg; >370 °C; decomposes.
Solubility in Water	Insoluble in water (< 0.1% @ 20 °C).
Solubility in Organic Solvents	Soluble in benzene, ligroin, warm alcohol, chloroform, turpentine, carbon disulfide, olive oil, ether, and certain esters.
Specific Gravity	0.90-0.94 (25 °C)
pH	Neutral to litmus.
Vapour Pressure	< 0.01 mm Hg @ 25 °C
Vapour Density (Air=1)	> 5
Evaporation Rate	<0.01; <1 (Butyl Acetate = 1)
Viscosity	99 °C mPas; ranges from 3 to 30 mm²/sec at 100 °C.
Volatile Component	0 %vol @ 21 °C
Partition Coefficient: n-octanol/water	Log Pow: 4.7 - > 6.7 (Calculated: KOWWIN Version 1.65 (EPIWIN)).
Flash Point	> 215 °C (open cup; ASTM D92); Values range from 215 to 296 °C.
Flammability	Combustible.
Auto-Ignition Temperature	245 °C
Explosion Properties	Do not mix with strong oxidants.
Other Information	Electrical resistivity: 1013 to 1017 ohm metre. Heat of fusion (C25H52): 200-220 J/g. Refractive index: 1.149 - 1.448 at 100 °C.

10. Stability and reactivity

Chemical Stability	Stable under normal temperatures, pressures and conditions of handling and storage.
Conditions to Avoid	Overheating the product near ignition sources, excess heat, direct sunlight, open flames or other sources of ignition and incompatible materials.
Incompatible Materials	Strong oxidizing agents, eg., peroxides, chlorine, strong caustics, heat.
Hazardous Decomposition Products	Highly toxic and/or irritating fumes including carbon monoxide, carbon dioxide and other products such as aldehydes and ketones depending on conditions of oxidation.
Possibility of hazardous reactions	Reactive with oxidizing agents.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Inhalation	Inhalation of airborne dust may cause irritation to the mucous membrane and upper airways. Paraffin wax fumes from molten product may be irritating to mucous membranes of the eyes, nose, throat and respiratory tract, especially of sensitized persons, and may also produce coughing, sneezing, breathing difficulties, headaches, nausea and loss of co-ordination.
Ingestion	Ingested paraffin wax is not absorbed, and is considered a low hazard for usual industrial handling. Ingestion of this product may irritate the gastric tract causing stomach upset, nausea and vomiting. Ingestion of large quantities may depress the central nervous system and have a mild laxative effect and cause diarrhoea.
Skin	At Room Temperature: Not expected to be harmful, but it may cause mild skin irritation. May cause abrasive irritation in contact with the skin, which can result in redness, itching and possible dermatitis. Low hazard for usual industrial handling. Contact with heated product can cause severe irritation and possible thermal skin burns with permanent scarring of tissue. Repeated or prolonged contact may cause defatting irritation reaction to sensitive individuals.

Eye	At Room Temperature: Eye contact may cause mechanical irritation. May result in mild abrasion. Fumes, vapours or smoke from thermally degraded product: Can cause irritation to eyes. Symptoms may include redness and tearing. Heated Product: May cause burns to the eye.
Chronic Effects	Respiratory problems may arise from continued poor handling practice. Poor personal hygiene can lead to wax plugging of skin follicles and producing so-called 'wax boils'. Prolonged or repeated skin contact may cause defatting leading to dermatitis. Chronic ingestion may produce accumulation in target organs (liver, spleen) with associated nonspecific immune response (based on animal data).

12. Ecological information

Ecological Information	No ecological problems are to be expected when the product is handled and used with due care and attention.
Ecotoxicity	Quantitative data on the ecological effect of this product are not available.
Persistence and degradability	Biologically nondegradable. The material is slowly degradable in aerobic conditions (8002-74-2).
Mobility	Distribution: Log Pow: 4.7 - > 6.7 (Calculated).
Information on Ecological Effects	Stability in Soil: Type: field trial Soil classification.: other: Woodland park origin Method: other: litter bag test, protocol described in paper by de Kreuk Remark: Samples were all applied to paper, enclosed in nylon mesh bags, placed in woodland soil and covered in leaf litter. Tests were done using mesh sizes of 5 mm and 45 um for two six-month periods, viz, spring/summer and autumn/winter. Degradation was judged visually, by weighing and by gas chromatographic analysis. Result: Microcrystalline waxes were degraded by about 20% in all tests. Paraffin and intermediate waxes in 5 mm bags were 100% degraded in six months in spring/summer and 100% degraded in three months in autumn/winter. Paraffin and intermediate waxes in 45 um bags were approximately 75% degraded in each six-month period. The study concluded that waxes are initially attacked by soil microfauna and are mainly degraded by soil microflora. Source: Mobil Oil Francaise Notre-Dame-de-Gravencon Test substance: Two paraffin waxes, CAS no. 8002-74-2; an intermediate wax, CAS no. 97489-05-9; and a microcrystalline wax, CAS no. 63231-60-7 (note: CAS nos. were not assigned in the original study).

13. Disposal considerations

Disposal Considerations	Dispose of according to relevant local, state and federal government regulations.

14. Transport information

Storage and Transport	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. If stored at over 100 °C this product is a Class 9 Dangerous Good, UN 3257, ELEVATED TEMPERATURE LIQUID, Packing Group III, Hazchem 2W for bulk. The Dangerous Goods Regulations in your State or Territory must be applied. Dangerous goods of Class 9 (Miscellaneous Dangerous Goods) are incompatible in a placard load with any of the following: -Class 1, Class 5, if the Class 9 dangerous goods are fire risk substances.

15. Regulatory information

Poisons Schedule	Not Scheduled

16. Other Information

Literature References	Australian Government Department of Health and Ageing, 'Standard for the Uniform Scheduling of Medicines and Poisons No. 2', Commonwealth of Australia, August 2011. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.',

Rev., John Wiley and Sons, Inc., NY, 1997.
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.
South Australia Government, 'Approved Code of Practice for the Labelling of Workplace Substances', 1995.
Standards Australia 'AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids.
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.
Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.
Worksafe Australia, 'Hazardous Substances Information System, 2005'.
Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]'.
Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]'.

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:
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Empirical Formula & Structural Formula C_nH_{2n+2} (n=20-50, Paraffin wax; n=25-85, Microcrystalline wax).

User Codes

User Field Title	User Code
CAS No.	63231-60-7
CAS No.	8002-74-2

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