

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Chemical type	: Substance
Substance name	: Paraffin waxes (petroleum), clay-treated
Trade name	: 160°F Fully refined semi-microcrystalline wax
EC No. (EINECS No.)	: 265-145-6
EC index No.	: N/A
CAS registry No.	: 64742-43-4
REACH registration No.	: 01-2119487943-22-0012
Type of substance	: UVCB
Product code	: N/A
Synonyms	: Petroleum waxes, Fully refined paraffin waxes, Paraffin waxes and hydrocarbon waxes, Molten paraffin waxes, White waxes, Hydrocarbon waxes.

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/preparation	: Manufacture & distribution of substances Intermediates Formulation & (re)packing of substances and mixtures Coatings Release agents or binding agents Agrochemicals Road work Building and construction works Rubber production and processing Polymer production and processing Fuels Lubricants Functional fluids Explosives manufacture & uses Laboratory uses Other consumer uses
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1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Taiwan Wax Company, Limited
Address: 1, Zhongzheng Road, Minsyong Industrial Park, Chiayi 62146, Taiwan, R.O.C.
Phone number: +886 (5) 221-9180; Fax number: +886 (5) 221-9182
E-mail: cc.chang@wax.com.tw

1.4. Emergency telephone number

Emergency number	: +886 (5) 221-9180 ext. 85
Office hours	: 08:00~17:00 (GMT+8), Monday to Friday
Language(s) of the phone service	: Chinese (Mandarin) and English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

2.1.2. Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified.

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2.1.3. Additional information

No additional information available.

2.2. Label elements

2.2.1. Labeling according to Regulation (EC) No. 1272/2008 [CLP/GHS]

No labeling applicable.

2.2.2. Labeling according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No labeling applicable.

2.2.3. Additional information

Other hazard ranking : HMIS (scale 0~4)

Label



NFPA 704 (scale 0~4)



Hazard identification : Health hazard = 1
Flammability = 1
Physical hazard = 0
Personal protection = E

Health hazard = 0
Flammability = 1
Instability = 0
Special hazards = N/A

2.3. Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Environmental hazards : This substance is biodegradable and does not contain any component above 0.1% w/w which is considered carcinogenic by OSHA, IARC or NTP.

Other hazards which do not result in classification : High concentration of vapors may cause serious lung damage, and may induce headache, nausea, dizziness.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC [DSD]
Paraffin waxes (petroleum), clay-treated	CAS Reg. No. 64742-43-4 EC No. 265-145-6	100	Not classified.
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Paraffin waxes (petroleum), clay-treated	CAS Reg. No. 64742-43-4 EC No. 265-145-6	100	Not classified.

3.2. Mixtures

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If vapors or fumes are inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. If medical advice is needed, have product container or label at hand.

First-aid measures after skin contact : If contacted with hot material, take off all contaminated clothing immediately. Rinse skin thoroughly with plenty of water for at least 20 minutes and take medical advice. If medical advice is needed, have product container or label at hand.

First-aid measures after eye contact : If heated material splash into eyes, rinse immediately and plentifully with water, also under the eyelids, for at least 20 minutes. Seek immediate medical advice. If medical advice is needed, have product container or label at hand.

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First-aid measures after ingestion : If swallowed, do not induce vomiting. Rinse mouth with water (only if the person is conscious). Drink plenty of water. Seek medical advice immediately and show the container label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : High concentration of vapors or fumes from molten substance may induce: headache, nausea, dizziness. Irritant effect on the respiratory tract.

Symptoms/injuries after skin contact : Slightly irritating to skin. Prolonged/repetitive skin contact may cause skin defatting or dermatitis. Heated product causes burns.

Symptoms/injuries after eye contact : Slightly irritating to eyes.

Symptoms/injuries after ingestion : Nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Following contact with the molten substance, quickly cool affected skin area with water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO₂), dry chemical powder, foam, or water fog.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Apply aqueous extinguishing media carefully to prevent frothing/steam explosion.

Reactivity : On combustion, may form: carbon dioxide (CO₂), sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon monoxide (CO).

5.3. Advice for firefighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.

Protective equipment for firefighters : In case of fire: Wear self-contained breathing apparatus (SCBA). Refer to Section 8.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : If the substance is molten, use water spray/stream to protect personnel and to cool endangered containers. Emergency cooling must be provided for in case of fire. Wear protective clothing and equipment. Avoid contact with molten substance. Keep unprotected persons away. Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Refer to Section 8.

Emergency procedures : Remove all sources of ignition. Stop leak if safe to do so.

6.1.2. For emergency responders

Protective equipment : In case of fire, wear self-contained breathing apparatus. Wear suitable protective clothing, gloves and eye/face protection. Refer to Section 8.

Emergency procedures : Evacuate unnecessary personnel. Remove all sources of ignition. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Contaminated fire-fighting water must be collected separately. Prevent spreading over great surfaces (e.g. by damming or installing oil booms).

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

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Stop leak if safe to do so. Eliminate leaks immediately.

6.3.2. For cleaning up

Collect in closed containers for disposal. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). If the substance is molten, cool down with water and allow it to solidify.

6.3.3. Other information

Relevant water authorities should be notified of any large spillage to water course or drain.

6.4. Reference to other sections

If appropriate, Sections 8 and 13 shall be referred to.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Use only in well ventilated areas. Use personal protective equipment as required. The melted product can cause severe burns.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Floors should be impenetrable, resistant to liquids and easy to clean. The floor should be leak tight, jointless and not absorbent.

Incompatible materials : Strong oxidizing agents.

Storage area : Keep away from open flames, hot surfaces, sources of ignition, and humid air. Do not store near oxidizing agents. Store in a dark area. Only use anti-static equipped (spark-free) tools. Ensure the grounding of containers, apparatus, pumps and suction equipment. Floors should be impenetrable, resistant to liquids and easy to clean. The floor should be leak tight, jointless and not absorbent.

Special rules on packaging : Portable tanks/vessels.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The information provided below refers to the occupational exposure limits for paraffin wax fumes.

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)		
Belgium	Limit value (mg/m ³)	2 mg/m ³
France	VME (mg/m ³)	2 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
Spain	VLA-ED (mg/m ³)	2 mg/m ³
Switzerland	VLE (mg/m ³)	2 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	2 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	6 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	2 mg/m ³
Finland	HTP-arvo (8h) (mg/m ³)	1 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	2 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	6 mg/m ³
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	2 mg/m ³

8.2. Exposure controls

8.2.1. Appropriate engineering controls

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Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate ventilation. Do not eat, drink or smoke when using this substance.

8.2.2. Personal protective equipment

Take off contaminated clothing and wash before reuse. Used working clothes should not be used outside the work area. Wear protective gloves and eye/face protection.

Symbol



Protective gloves



Tightly sealed goggles

- Hand protection : The glove material has to be impermeable and resistant to the substance. Use gloves made of PVC.
- Eye protection : Wear eye protection/face protection.
- Respiratory protection : Wear respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used. In case of fire, wear self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Product
	160°F Fully refined paraffin wax
Carbon number distribution (ASTM D5442)	C21~C58
Average molecular weight, g/mol	505
Appearance (at ambient temperature)	Waxy solid (slabs).
Color, Saybolt scale (ASTM D156)	White, Min.+10
Odor	None.
Odor threshold	No data available.
pH	6.6~7.6
Melting point, °F / °C (ASTM D87)	158~162 / 70.0~72.0
Boiling point, °C (ASTM D2887)	IBP: 357; FBP: 636
Flash point, °C (ASTM D92, C.O.C.)	> 250
Decomposition temperature, °C	> 400
Self ignition temperature, °C (ASTM D5372)	No data available.
Relative evaporation rate compared to n-butyl acetate @25 °C	< 0.01
Flammability (% by volume in air)	Lower: 0.9%; Upper 7%
Explosive limits	No data available.
Vapor pressure, mmHg @ 25 °C	< 0.005
Relative vapor density (Air =1)	> 5
Relative density @ 100 °C (ASTM D1298)	0.77~0.80
Solubility(ies) @ 20 °C	In toluene: 14.5g/100g; In water: insoluble.
Log K _{OW}	> 15
Kinematic viscosity, cSt @ 100°C (ASTM D445)	6.4~7.5
Explosive properties	Not applicable.
Oxidizing properties	Not applicable.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

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No reactivity danger exists.

10.2. Chemical stability

Stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions are possible.

10.4. Conditions to avoid

Creation of concentrations within the explosion limits, presence of ignition sources and contact with a naked flame.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions: none. On combustion, may form: carbon dioxide (CO₂), sulfur dioxide (SO₂), nitrogen oxides (NO_x), or carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : No data available.

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
LD ₅₀ oral rat	> 5000 mg/kg
LD ₅₀ dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Not classified. Solid material is not expected to be a skin irritant; however, skin contact with molten wax may cause thermal burns. No harmful effects from skin absorption are expected.

Serious eye damage/irritation : Not classified. Solid material is not expected to be an eye irritant; however, contact with molten substance may cause thermal burns. Vapors from molten substance may cause watering of the eyes.

Respiratory or skin sensitization : Not classified. Not sensitizing.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Not classified.

Reproductive toxicity : Not classified.

Specific target organ toxicity (single exposure) : Not classified.

Specific target organ toxicity (repeated exposure) : Not classified.

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
NOAEL (oral, rat, 90 days)	1500 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	2000 mg/kg bodyweight/day

Aspiration hazard : Not classified.

Potential Adverse human health effects and symptoms : The molten substance can cause severe burns. High concentration of vapors may cause serious lung damage, and may induce headache, nausea, dizziness.

Environmental fate : Petroleum-based (mineral) waxes normally will float on water. In stagnant or slow-flowing waterways, a wax layer can reduce the atmospheric oxygen exchange with the water system. If the wax layer is not removed, oxygen depletion can result in loss of marine life.

SECTION 12: Ecological information

12.1. Toxicology

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Ecology - general : When used and handled according to specifications, the substance does not have any harmful effects according to our experience and the information provided to us.

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
LC ₅₀ fishes	> 100 mg/l 96 hours
LC ₅₀ other aquatic organisms	> 10000 mg/l 96 hours - shrimp
EC ₅₀ Daphnia	> 10000 mg/l 48 hours
NOEL (acute)	> 1000 mg/l 48 hours - daphnia
NOEL (chronic)	> 100 mg/l 72 hours - algae

12.2. Persistence and degradability

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
Persistence and degradability	Not expected - the substance is not soluble in water.

12.3. Bioaccumulative potential

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
Log K _{OW}	> 15
Bioaccumulative potential	Not expected - the substance is biodegradable.

12.4. Mobility in soil

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
Ecology - soil	Not expected - the substance is biodegradable.

12.5. Results of PBT and vPvB assessment

Paraffin waxes (petroleum), clay-treated (CAS Reg. No. 64742-43-4)	
Not expected because of the composition and low solubility in water.	

12.6. Other adverse effects

The formation of product layers on water surfaces prevents the access of oxygen.

12.7. Additional information

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Consult the local waste disposal expert about waste disposal. Dispose of this substance and its container to hazardous or special waste collection point. Disposal must be done according to official regulations.

Additional information : When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 14: Transport information

Under normal situation for shipment at ambient temperature, the substance is in stable solid form. It is not considered dangerous in sense of transport regulations.

SECTION 15: Regulatory information

15.1. Health, safety, and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU regulations

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EU – European Inventory of Existing Commercial chemical Substances (EINECS)	:	Substance is listed.
EU – Regulation (EC) No. 1907/2006 [REACH] as amended	:	No listed (SVHC) component is contained.
EU – Regulation (EC) No. 1272/2008 [CLP] as amended	:	Substance is not listed.
EU – Directive 67/548/EEC [DSD] as amended	:	Substance is not listed.
EU – Directive 1999/45/EC [DPD] as amended	:	Substance is not listed.
EU – Directive 2005/69/EC [RoHS] as amended	:	No listed component is contained.
EU – Directive 2011/65/EU [RoHS2] as amended	:	No listed component is contained.

15.1.2. Other regional/national regulations

OECD – List of High Production Volume Chemicals	:	Substance is listed.
US – Toxic Substance Control Act (TSCA)	:	Substance is listed.
US EPA – High Production Volume (HPV) Challenge Program Chemical List	:	Substance is listed.
US FDA – Code of Federal Regulations (CFR)	:	Substance meets the UV absorbance limits described in 21 CFR 172.886(b). It may be safely used in or on food.
Canada – Domestic Substances List (DSL)	:	Substance is listed.
Japan – Existing and New Chemical Substances (ENCS)	:	Substance is listed.
Korea – Existing Chemicals List (ECL)	:	Substance is listed.
China – Inventory of Existing Chemical Substance (IECSC)	:	Substance is listed.
Taiwan – National Existing Chemical Inventory (NECI)	:	Substance is listed.
Philippines – Inventory of Chemicals and Chemical Substances (PICCS)	:	Substance is listed.
Australia – Inventory of Chemical Substances (AICS)	:	Substance is listed.
New Zealand – Inventory of Chemicals (NZIoC)	:	Substance is listed.

15.2. Chemical safety assessment

Chemical safety assessment has not been established. The substance is not classified as dangerous under normal conditions.

SECTION 16: Other information

Exposure scenarios	:	Not required.
Sources of key data	:	R&D Department, Taiwan Wax Company, Ltd.
Prepared by	:	H.S.E. Section, Taiwan Wax Company, Ltd.
Abbreviations and acronyms	:	ACGIH – American Conference of Governmental Industrial Hygienists; ASTM – American Society for Testing and Materials; CAS – Chemical Abstracts Service; CLP – Classification, Labeling and Packaging; CSR – Chemical Safety Report; DPD – Dangerous Preparations Directive; DSD – Dangerous Substances Directive; EC – European Community; EC ₅₀ – Effective Concentration, 50%; EEC – European Economic Community; EINECS – European Inventory of Existing Commercial Chemical Substances; GHS – Globally Harmonized System; HMIS – Hazardous Materials Identification System; IARC – International Agency for Research on Cancer; K _{OW} – Octanol-Water Partition Coefficient; LC ₅₀ – Lethal Concentration, 50%; LD ₅₀ – Lethal Dose, 50%; NFPA – National Fire Protection Association; NIOSH – National Institute for Occupational Safety and Health; NOAEL – No-Observed-Adverse-Effect Level; NOEL – No-Observed-Effect Level; NTP – National Toxicology Program; OSHA – Occupational Safety and Health Administration; PBT – Persistent, Bio-accumulative and Toxic Chemicals; REACH – Registration, Evaluation, Authorization and Restriction of Chemicals; RoHS – Restriction of Hazardous Substances; SDS – Safety Data Sheet; SVHC – Substance of Very High Concern; UVCB – Unknown or Variable compositions, Complex reaction products and Biological materials; vPvB – very Persistent and very Bio-accumulative Chemicals.

The information presented in this Safety Data Sheet is based on current knowledge and is believed to be complete and accurate. It describes the product for the purposes of safety, health and environment requirements only and shall, therefore, be used only as a guide. The data refers to a specific product and may not be valid for combined uses with other products. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. Taiwan Wax shall not be responsible for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices.