

Prepared: June 22, 2009

## MATERIAL SAFETY DATA SHEET

### 1 Chemical product and company identification

**Product Name:** Paraffin Wax  
**Product Code:** Fully Refined Paraffin Wax  
Grades: 155/160, 150/155, 140/145, 135/140,  
130/135, 125/130, 120/125, 115/120

**Supplier Name:** NIPPON SEIRO CO., LTD.  
**Address:** No.22-15, SHINKAWA 1-CHOME CHUO-KU, TOKYO  
104-0033 JAPAN

distribution dealer : Daemyung chemical  
ADD: 187, Cheongwonsandan 3-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea  
T: +82-2-462-3857

### 2 Hazards identification

#### GHS Classification

##### Physical and Chemical Hazards


Explosives:	Classification not possible
Combustible/flammable gases:	Not applicable
Combustible/flammable aerosols:	Not applicable
Combustion-supporting/oxidizing gases:	Not applicable
Gases under pressure:	Not applicable
Flammable liquids:	Not applicable
Combustible solids:	Classification not possible
Self-reactive substances and mixtures:	Classification not possible
Pyrophoric liquids:	Not applicable
Pyrophoric solids:	Classification not possible
Self-heating substances and mixtures:	Classification not possible
Substances and mixtures which, in contact with water, emit flammable gases:	Not applicable
Oxidizing liquids:	Not applicable
Oxidizing solids:	Not applicable
Organic peroxides:	Not applicable
Corrosive to metals:	Classification not possible

##### Health and Environmental Hazards

Acute toxicity Oral :	Not classified
Acute toxicity Dermal :	Classification not possible
Acute toxicity Inhalation Gases:	Not applicable
Acute toxicity Inhalation Vapours:	Classification not possible
Acute toxicity Inhalation Dusts :	Classification not possible
Acute toxicity Inhalation Mists:	Classification not possible
Skin corrosion / irritation:	Not classified
Serious eye damage / eye irritation:	Category 2B – Mildly irritating to eyes
Respiratory or skin sensitization:	Classification not possible

Germ cell mutagenicity:	Classification not possible
Carcinogenicity:	Classification not possible
Reproductive toxicity:	Classification not possible
Specific target organ systemic toxicity – single exposure:	Category3 – Respiratory irritation
Specific target organ systemic toxicity – repeated exposure:	Not classified
Aspiration toxicity:	Classification not possible
Hazardous to the aquatic environment – acute toxicity:	Classification not possible
Hazardous to the aquatic environment – chronic toxicity:	Classification not possible

#### Label Elements

<b>Symbol:</b>	Exclamation mark	
		No symbol
<b>Signal Word:</b>	Warning	Warning
<b>Hazard Statement:</b>	May cause respiratory irritation.	Causes eye irritation

#### Precautionary statements

Prevention:	Use only outdoors or in well-ventilated area. Avoid breathing dust/fume/mist/vapours/spray.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash hands after handling. IF INHALED: Remove to fresh air and keep at rest in position comfortable for breathing. Call doctor/physician if you feel unwell.
Storage:	Store container tightly closed in well-ventilated place.
Disposal:	Dispose in accordance with local/regional/national/international regulation.

### 3 Composition/information on ingredients

#### Chemical substance

Common chemical name or generic name:	Paraffin Wax
Synonyms:	Paraffin waxes and Hydrocarbon waxes Petroleum wax
Chemical formula:	$C_nH_{2n+2}$ ( $n=18\sim 48$ )
CAS number:	8002-74-2
EINECS number:	232-315-6

### 4 First-aid measures

<b>Inhalation:</b>	Remove to fresh air and keep at rest in position comfortable for breathing. Call doctor/physician if you feel unwell.
<b>Skin contact:</b>	Cool with cold water and obtain medical attention immediately, if burned by hot product.

- Eye contact:** Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists, get medical advice/attention.
- Ingestion:** Wash mouth well with water.  
If irritation persists, get medical advice/attention.
- Expected acute symptoms and delayed symptoms:** Rash, inflammation
- The most important symptoms and effects:** No information

## 5 Fire-fighting measures

### Extinguishing media:

- Small fires: Dry chemical, foam, carbon dioxide  
Large fires: Foam

**Extinguishing media that are NOT suitable:** Water

**Specific hazards:** Hazardous fumes, gas or vapours may evolve on burning.

**Specific methods of fire-fighting:** Treat as petroleum oil fire

**Protection of firefighters:** For large fires, protective wear and automatic supplying air respirator is required.

## 6 Accidental release measures

### Personal precaution, protective equipment and emergency measures:

- Avoid contact with skin and eyes.  
Wear personal protective equipment.  
Evacuate all non essential personnel from the immediate area.  
Do not work downstream of wind.

### Environmental precaution:

Be careful not to discharge, not even a small amount, to river system.

### Recovery and neutralization:

- Recover free solid.  
If molten wax spilled, solidify and recover.

### Method and materials for containing and cleaning up:

- Contain molten wax with sand or earth.  
Do not disperse using water. Allow wax to cool and remove as a solid.

### Prevention of Secondary hazards:

Eliminate all sources of ignition.

## 7 Handling and storage

### Handling:

- Technical measures: Wear protective equipment when there is possibility of inhalation.  
Local and general ventilation: Place local exhaust fan in areas where vapours and fumes are produced.  
Safe handling advice: Avoid breathing vapours and fumes from molten product.  
Wash hands after handling.  
Use only outdoors or in well-ventilated area.  
Avoidance of contact: See Stability and Reactivity, section 10, of this Safety Data Sheet.

### Storage:

- Technical measures: This materials is not hazardous under normal storage conditions .  
Do not store near high heat or open flames.  
Incompatible products: Strong oxidizing agents, strong acids

Storage conditions: Store in a well-ventilated, cool, dark place, away from fire sources and high temperature objects. When storing in molten state, be cautious of coagulation due to over heating.

Packaging materials: If stored in liquid state, use stainless steel for containers.

## 8 Exposure controls/personal protection

### Control parameters:

Allowable Concentration  
ACGIH (2006) 8hr TWA 2mg/m<sup>3</sup> (for paraffin wax fumes in air)

**Engineering measures:** Install eyes washer and shower in the place of operation.  
Provide local exhaust ventilation system.  
Ensure compliance with applicable exposure limits.

### Personal protective equipment:

Respiratory protection: Breathing protection when handling molten form.  
Hand protection: Heat-insulating gloves when handling molten form.  
Eye protection: Safety goggles when handling molten form.  
Skin and body protection: Heat Protective suit when handling molten form.

**Hygiene measures:** Wash hands after handling.

## 9 Physical and chemical properties

Physical state, form, colour, etc.: White waxy solid  
Odour: Practically odourless  
pH: No data  
Melting point and freezing point: See Table 1  
Boiling point, initial boiling point and boiling range: No data  
Flash point: See Table 1  
Explosion range: No data  
Vapour pressure: No data  
Vapour density: No data  
Specific gravity(density): See Table 1  
Solubility: Not soluble in water  
n-Octanol/water partition coefficient: >6<sup>2)</sup>  
Spontaneous ignition temperature: No data  
Decomposition temperature: No data  
Odour threshold value: No data  
Evaporation rate: Not applicable  
Combustion characteristics (solid, gas): No data  
Viscosity: Not applicable

Table 1: Typical Properties

Grade	Melting Point °C	Flash Point (C.O.C.) °C	Density g/cm <sup>3</sup> at 80 °C
155 / 160	69	270	0.782
150 / 155	66	260	0.778
140 / 145	61	234	0.770

135 / 140	58	230	0.768
130 / 135	55	218	0.767
125 / 130	53	216	0.765
120 / 125	50	214	0.764
115 / 120	47	210	0.763

## 10 Stability and reactivity

Stability:	Stable in normal handling conditions Polymerization will not occur.
Hazardous reaction potential:	Oxidizing agents and strong acids react on this product.
Conditions to avoid:	Avoid excessive heat, flames and all sources of ignition.
Incompatible products:	Oxidizing agents, strong acids
Hazardous decomposition products:	Carbon monoxide, carbon dioxide

## 11 Toxicological information

Acute toxicity oral:	rat LD <sub>50</sub> : >5000mg/kg (IUCLID(2000))
dermal:	rabbit LD <sub>50</sub> : >3600mg/kg (IUCLID(2000))
inhalation (vapours, dusts):	No information is available.
Skin corrosion property • stimulativeness:	rabbit: mild (RTECS(2003)) rabbit: not irritating (IUCLID(2000))
Critical damage and stimulativeness to eye:	rabbit: mild irritant (RTECS (2004)) rabbit: slightly irritant(IUCLID(2000))
Respiratory organs sensitization or skin sensitization:	No information is available.
Generative cell mutagenicity:	No information is available.
Carcinogenicity:	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.
Reproductive toxicity:	No information is available.
Specified target organ • general toxicity – single exposure:	Fumes may cause mild irritation. (PATTY5th(2001), ICSC(2003))
Specified target organ • general toxicity – repetitive exposure:	Oral(rat): negative result (EHC20(1982))
Aspiration respiratory organs hazard:	No information is available.

## 12 Ecological information

Hazardous to the aquatic environment – acute toxicity:	No information is available.
Hazardous to the aquatic environment – chronic toxicity:	No information is available.
Persistence/degradability:	No information is available.

## 13 Disposal considerations

<b>Residual waste:</b>	Dispose in accordance with the current local regulations.
<b>Contaminated containers or packaging:</b>	Dispose in accordance with the current local regulations.

#### 14 Transport information

Ocean contaminant (correspondence): IMO IBC code

Paraffin wax: Noxious Liquid Substance, Pollution Category Y

#### 15 Regulatory information

U.S.Regulations : ACGIH, DOT, FDA, FIFRA, NIOSH, STATE, TSCA

FDA: Indirect Food Additives: Adjuvants, Production Aids, and Sanitizers (21CFR Part 178.3710)

ACGIH : TLVS Threshold Limit Values

American Conference of Governmental Industrial Hygienists Threshold Limit Values and Biological Exposure Indices for 2006

Listed Name(s): Paraffin wax fume

EPA Toxic Substance Control Act(TSCA)Status :

This product is listed on the TSCA inventory.

International Regulations:

Inventory Status :

On TSCA , DSL, EINECS, ENCS, AICS, ECL, SWISS, and PICCS

MARPOL 73/78 Annex II and IBC Code:

Paraffin wax: Noxious Liquid Substance, Pollution Category Y

#### 16 Other Information

NFPA RATING: Health = 0 Fire = 1 Reactivity = 0

HMIS RATING: Health = 0 Fire = 1 Reactivity = 0

#### Literature references:

- 1) JCDB Chem. DB (2006) : GHS Model MSDS ID720
- 2) IUCLID (2000)
- 3) RTECS (2003): RV0350000
- 4) PATTY 5th (2001)
- 5) ICSC (2003) : WHO/IPCS International Chemical Safety Cards ICSC1457
- 6) EHC 20 (1982)
- 7) ACGIH (2006)
- 8) JNITE home page (2006): GHS Classification result ID720

**Note** : All statements, information, and data given herein are believed to be accurate and reliable but are presented without guaranty and responsibility. Statements or suggestions concerning possible use of our product are made without guaranty, since the conditions of use are beyond our control.