1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SPO Slack Wax (Bukom)
Product code: 002D6052
CAS-No.: 64742-61-6
Manufacturer or supplier's details
Supplier: Shell Eastern Trading (PTE) Ltd
9 NORTH BUONA VISTA DRIVE #07-01
TOWER 1, THE METROPOLIS
Singapore 138588
Singapore
Telephone: +65-6384 8000
Fax: 
Emergency telephone number: +44 (0) 151 350 4595

Recommended use of the chemical and restrictions on use
Recommended use: Slack Wax
Restrictions on use: This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.

2. HAZARDS IDENTIFICATION

GHS Classification
Based on available data this substance / mixture does not meet the classification criteria.

GHS label elements
Hazard pictograms: No Hazard Symbol required
Signal word: No signal word
Hazard statements: PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.
HEALTH HAZARDS:
Not classified as a health hazard under GHS criteria.
ENVIRONMENTAL HAZARDS:
Not classified as an environmental hazard under GHS criteria.

Precautionary statements: Prevention:
No precautionary phrases.
Other hazards which do not result in classification
Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Not classified as flammable but will burn.

4. FIRST-AID MEASURES

If inhaled
No treatment necessary under normal conditions of use.
If symptoms persist, obtain medical advice.

In case of skin contact
Remove contaminated clothing.
If contact with hot product, immediately cool the burn area by flushing or immersing the affected area with water for at least 15 to 20 minutes. Do not attempt to remove anything from the burn area or apply burn creams or ointments. During transport do not cover the wound with dressing or sheet since these may adhere to the product.
It should be noted this product contracts on cooling.
Where a limb is encased, care should be taken to avoid the development of a tourniquet effect. In the event of this occurring, the adhering product must be softened and/or split to prevent restriction of blood flow.
All burns should receive medical attention.

In case of eye contact
Flush eye with copious quantities of water.
Remove contact lenses, if present and easy to do. Continue rinsing.
If persistent irritation occurs, obtain medical attention.

If swallowed
In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Protection of first-aiders
When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the
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Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media : Do not use water in a jet.

Specific hazards during firefighting : Hazardous combustion products may include:
A complex mixture of airborne solid and liquid particulates and gases (smoke).
Carbon monoxide may be evolved if incomplete combustion occurs.
Unidentified organic and inorganic compounds.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter’s clothing approved to relevant Standards (e.g. Europe: EN469).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.

Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material.
Reclaim liquid directly or in an absorbent.
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Additional advice : For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers. Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene. Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

None established.

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.
Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.
L'Institut National de Recherche et de Sécurité, (INRS), France http://www.inrs.fr/accueil


Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Sécurité, (INRS), France http://www.inrs.fr/accueil

Engineering measures: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:
Define procedures for safe handling and maintenance of controls.
Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance.
Retain drain downs in sealed storage pending disposal or subsequent recycle.
Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment

Protective measures
Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection: No respiratory protection is ordinarily required under normal
Hand protection

Remarks: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection: If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection: Skin protection is not ordinarily required beyond standard work clothes. It is good practice to wear chemical resistant gloves.

Thermal hazards: When handling heated product, wear heat resistant gloves, safety hat with chin strap, face shield (preferably with a chin guard), safety glasses, heat resistant coveralls (with cuffs over gloves and legs over boots), neck protection and heavy duty boots, e.g. leather for heat resistance.

Environmental exposure controls
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General advice: Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Waxy solid at 20 °C.</td>
</tr>
<tr>
<td>Colour</td>
<td>yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight hydrocarbon</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Data not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>45 - 55 °C / 113 - 131 °F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>300 - 555 °C / 572 - 1031 °F</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;= 200 °C / &gt;= 392 °F</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Data not available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Typical 10 %(V)</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Typical 1 %(V)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;= 0.0005 kPa (20.0 °C / 68.0 °F)</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>&gt; 1 (estimated value(s) / )</td>
</tr>
<tr>
<td>Relative density</td>
<td>Data not available</td>
</tr>
<tr>
<td>Density</td>
<td>785 kg/m³ (15.0 °C / 59.0 °F)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>negligible</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Data not available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Pow: &gt; 6(based on information on similar products)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt; 320 °C / 608 °F</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity : The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

Chemical stability : Stable.

Possibility of hazardous reactions : Reacts with strong oxidising agents.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on data on the components and the toxicology of similar products.

Information on likely routes of exposure : Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Product:

Acute oral toxicity : LD50 rat: > 5,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity : Remarks: Data not available

Acute dermal toxicity : LD50 Rabbit: > 2,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.
Skin corrosion/irritation

**Product:**
Remarks: Not irritating to skin. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Serious eye damage/eye irritation

**Product:**
Remarks: Not irritating to eye.

Respiratory or skin sensitisation

**Product:**
Remarks: Not a skin sensitiser.
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

**Product:**
Remarks: Non mutagenic. Based on available data, the classification criteria are not met.

Carcinogenicity

**Product:**
Remarks: Not a carcinogen. Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Material</th>
<th>GHS/CLP Carcinogenicity Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slack wax (petroleum)</td>
<td>No carcinogenicity classification.</td>
</tr>
</tbody>
</table>

Reproductive toxicity

**Product:**
Remarks: Not a developmental toxicant. Does not impair fertility. Based on available data, the classification criteria are not met.

STOT - single exposure

**Product:**
Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

**Product:**
Aspiration toxicity

**Product:**
Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

**Basis for assessment**
Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. (LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

**Ecotoxicity**

**Product:**

**Toxicity to fish (Acute toxicity):**
Remarks: LL/EL/IL50 > 100 mg/l
Practically non toxic:
Based on available data, the classification criteria are not met.

**Toxicity to crustacean (Acute toxicity):**
Remarks: LL/EL/IL50 > 100 mg/l
Practically non toxic:
Based on available data, the classification criteria are not met.

**Toxicity to algae/aquatic plants (Acute toxicity):**
Remarks: LL/EL/IL50 > 100 mg/l
Practically non toxic:
Based on available data, the classification criteria are not met.

**Toxicity to fish (Chronic toxicity):**
Remarks: NOEC/NOEL > 100 mg/l

**Toxicity to crustacean (Chronic toxicity):**
Remarks: NOEC/NOEL > 1 mg/l

**Toxicity to microorganisms (Acute toxicity):**
Remarks: LL/EL/IL50 > 100 mg/l
Practically non toxic:
Based on available data, the classification criteria are not met.

**Persistence and degradability**

**Product:**

**Biodegradability**
Remarks: Major constituents are expected to be readily biodegradable, but the product contains components that may persist in the environment. Based on available data, the classification criteria are not met.
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Bioaccumulation : Remarks: Contains constituents with the potential to bioaccumulate.

Partition coefficient: n-octanol/water : Pow: > 6Remarks: (based on information on similar products)

Mobility in soil

Product:

Mobility : Remarks: Semi-solid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile.

Remarks: Floats on water.

Other adverse effects

no data available

Product:

Additional ecological information : Data not available

Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Films formed on water may affect oxygen transfer and damage organisms., May cause physical fouling of aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Do not dispose into the environment, in drains or in water courses

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

Waste, spills or used product is dangerous waste.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation

Remarks : Disposal should be in accordance with applicable regional, national, and local laws and regulations.
14. TRANSPORT INFORMATION

International Regulations

ADR
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Pollution category: Y
- Ship type: 2
- Product name: Paraffin wax.
- Special precautions: Not applicable

Special precautions for user

Remarks: Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Local Regulations

<table>
<thead>
<tr>
<th>Regulation</th>
<th>This product is not subject to the requirements in the Act/Regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace Safety and Health Act &amp; Workplace Safety and Health (General Provision) Regulations</td>
<td></td>
</tr>
<tr>
<td>Fire Safety Act and Fire Safety (Petroleum &amp; Flammable Materials) Regulations</td>
<td></td>
</tr>
<tr>
<td>Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations</td>
<td></td>
</tr>
<tr>
<td>Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations</td>
<td></td>
</tr>
</tbody>
</table>

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Other international regulations

The components of this product are reported in the following inventories:

- EINECS: All components listed or polymer exempt.
- TSCA: All components listed.
16. OTHER INFORMATION

Further information

Other information : A vertical bar (|) in the left margin indicates an amendment from the previous version.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.