Easy Steps to identify chemicals that are regulated/ licensed by SCDF
What chemicals are regulated/licensed by SCDF?

1. Petroleum (Flash Point based)
   
   - **All Class O Petroleum**: liquefied petroleum gas
   - **All Class I Petroleum**: any petroleum having a flashpoint below 23°C
   - **All Class II Petroleum**: any petroleum having a flashpoint exceeding 23°C but less than 60°C
   - **Class III Petroleum**: any petroleum having a flashpoint exceeding 60°C but less than 93°C - **Diesel** is the only Class III petroleum that is regulated
What chemicals are regulated/licensed by SCDF?

2. Flammable Materials *(Scheduled List)*
   - Any substance specified in the Schedule List
   - HS codes and product codes in the Scheduled List are for use in permit declaration of import

3. Mixtures of Petroleum & Flammable Materials (P&FM)
   - Any mixture that contains component of petroleum and / or flammable materials *(Scheduled List)* and has **a flash point less than 60°C**

4. Petroleum & Flammable Materials (P&FM) that are above the exemption quantities are required for import, transport and storage licences.
**Exemption Quantity For Import & Transport**

Exemption Quantity for Import and Transport, where the P&FM below the exemption quantity, no import and transport licences are required.

<table>
<thead>
<tr>
<th>Class of Petroleum</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Class O (LPG)</td>
<td>Total of 130 kg Gross wt in not more than 2 cylinders</td>
</tr>
<tr>
<td>(b) Class I</td>
<td>20 L</td>
</tr>
<tr>
<td>(c) Class II</td>
<td>200 L</td>
</tr>
<tr>
<td>(d) Class III</td>
<td>200 L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FM</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid FM</td>
<td>10 Kg</td>
</tr>
<tr>
<td>Liquid FM</td>
<td>20 L</td>
</tr>
<tr>
<td>Gaseous FM</td>
<td>Total of 130 kg Gross wt in not more than 2 cylinders</td>
</tr>
</tbody>
</table>

Transportation of mixed classes of P&FM will be subjected to licensing control regardless of quantity.
## Exemption Quantity For Storage

**First Schedule of Exemption Order**

- **Quantity of Class O petroleum (LPG) not requiring a storage licence**

<table>
<thead>
<tr>
<th>Type of Usage</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) For private use in a private dwelling house</td>
<td>Not more than 30 kg in not more than 2 cylinders</td>
</tr>
<tr>
<td>(ii) For use in an eating place</td>
<td>Not more than 30 kg per stall where the maximum quantity to be stored in an eating place does not exceed 200 kg</td>
</tr>
<tr>
<td>(iii) For use in a restaurant</td>
<td>Not more than 200 kg</td>
</tr>
<tr>
<td>(iv) For use in a factory</td>
<td>Not more than 300 kg per factory</td>
</tr>
</tbody>
</table>
# Exemption Quantity For Storage

**First Schedule of Exemption Order**

- **Quantity of Class I, II & III of petroleum (kept in air-tight containers) not requiring a Storage licence**

<table>
<thead>
<tr>
<th>Type of Usage</th>
<th>Class I Petroleum</th>
<th>Class II Petroleum</th>
<th>Class III Petroleum</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) For private use in a private dwelling house or for use in any business other than in a factory</td>
<td>Not more than 20 L</td>
<td>Not more than 200 L</td>
<td>Not more than 1,500 L</td>
</tr>
<tr>
<td>(ii) For use in a factory</td>
<td>Not more than 400 L</td>
<td>Not more than 1,000 L</td>
<td>Not more than 1,500 L</td>
</tr>
</tbody>
</table>
### Exemption Quantity For Storage

#### Second Schedule of Exemption Order

<table>
<thead>
<tr>
<th>Flammable Material</th>
<th>General Manufacturing Purpose</th>
<th>Med/Lab Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetal</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Acetone</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Acetyl chloride</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Acetylene</td>
<td>10 kg</td>
<td>10 kg</td>
</tr>
<tr>
<td>Aldehydes</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Allyl acetate</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Allyl bromide</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Allyl chloride</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Allyl formate</td>
<td>20 L</td>
<td>20 L</td>
</tr>
<tr>
<td>Allyl iodide</td>
<td>20 L</td>
<td>20 L</td>
</tr>
</tbody>
</table>
Para 5 Of Exemption Order

Exemption Quantity for mixed storage of Petroleum and FM

<table>
<thead>
<tr>
<th>Flammable Materials</th>
<th>Quantity (Aggregate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Solid</td>
<td>20 kg</td>
</tr>
<tr>
<td>Flammable Liquid</td>
<td>40 litres</td>
</tr>
<tr>
<td>Flammable Gas</td>
<td>10 kg</td>
</tr>
</tbody>
</table>

**Important Note:** Licence is not required where substances are mixed states and their aggregate weight does not exceed 20 kg
What Petroleum & Flammable Materials products are **exempted** from SCDF’s licences?

- Adhesives
- Cigarette lighters and portable gas lighters
- Cosmetic and beauty products including hair styling products
- Food and beverages including beer, wine and liquor
- Insecticides and pesticides
- Lacquer solvents
- Lubricants
- Medicine
- Paints
- Pharmaceutical products
- Varnishes

**THESE PRODUCTS DO NOT NEED P&FM LICENCES FROM SCDF**
Simple Chart to identify regulated chemicals

Flash point of pure chemical or mixture is less than 60 °C

Is the chemical, Diesel?

- Yes: Regulated
- No: Does chemical's formula (pure chemical or one of the component of the mixture) contain only carbon atom(s) & hydrogen atom(s)?
  - Yes: Regulated
  - No: Does name of pure chemical or one of the component of the mixture, appear in Scheduled List?
    - Yes: Regulated
    - No: Not Regulated

Is flashpoint of the pure chemical or mixture more than 60 °C?

- Yes: Not Regulated
- No: Is chemical one of the products in the exempted products?
  - Yes: Not Regulated
  - No: Does name of pure chemical or one of the component of the mixture, appear in Scheduled List?
    - Yes: Regulated
    - No: Not Regulated

Start
Step 1

Is chemical one of the products in the exempted products?

Exempted Products

- Adhesives
- Cigarette lighters and portable gas lighters
- Cosmetic and beauty products including hair styling products
- Food and beverages including beer, wine and liquor
- Insecticides and pesticides
- Lacquer solvents
- Lubricants
- Medicine
- Paints
- Pharmaceutical products
- Varnishes

What is the use/purpose of this chemical?

- No P&FM licence is required if it is a finished product that belongs to one of the exempted products.
Step 2

Is flashpoint of the pure chemical or mixture more than 60 °C?

Is the chemical, Diesel?

What is the flash point of the chemical?

- Look under the Safety Data Sheet’s (SDS) Section titled “Physical & Chemical Properties”.

- **Diesel** is the only Class III petroleum (flash point above 60°C) that is regulated by SCDF.
Step 3

Flash point of pure chemical or mixture is less than 60 °C

Does chemical's formula (pure chemical or one of the component of the mixture) contain only carbon atom(s) & hydrogen atom(s)?

What is the chemical formula?

- Look under the SDS’s Section titled “Composition/Information on Ingredients”.
- If pure chemical or one of the component of mixture contains only C & H₂ atoms, it is licensable. Check on list of licensable Petroleum.

3. Composition/Information On Ingredients

- Chemical identification: Butene, C₄H₈
- Common name(s)/synonym(s): Butylene, Alpha Butylene, Ethylethylene
- CAS number/EC number: 106-98-9/25167-67-3
Step 4
Flash point of pure chemical or mixture is less than 60 °C

- What is the chemical name?
  - Look under the SDS’s Section titled “Composition/Information on Ingredients”.
  - The product is regulated if it contains components of licensable Petroleum and/or Flammable Materials.
  - Declare the mixture by using the highest component % of Petroleum and/or Flammable Materials.
  - Check for chemicals with synonym.

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Simple Chart to identify regulated chemicals

- Is chemical one of the products in the exempted products?
- Is flash point of the pure chemical or mixture more than 60 °C?
- Does chemical’s formula (pure chemical or one of component of the mixture) contain only carbon atom(s) & hydrogen atom(s)?
- Does name of pure chemical or one of the component of the mixture appear in Scheduled List?

---

Section 3. Hazardous Ingredients

<table>
<thead>
<tr>
<th>Hazardous Ingredient</th>
<th>% wt</th>
<th>CAS Number</th>
<th>LC50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>81.7</td>
<td>64-17-5</td>
<td>7,060 mg/kg oral rat</td>
<td>20,000 ppm/10 hr. inhalation rat</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>4.4</td>
<td>67-63-0</td>
<td>5,045 mg/kg oral rat</td>
<td>72,600 mg/m² inhalation rat</td>
</tr>
<tr>
<td>Methanol</td>
<td>4.0</td>
<td>67-56-1</td>
<td>5,600 mg/kg oral rat</td>
<td>64,000 ppm/4 hr. inhalation rat</td>
</tr>
<tr>
<td>Orange G powder</td>
<td>NA</td>
<td>1396-15-8</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Phosphotungstic acid</td>
<td>NA</td>
<td>12067-99-1</td>
<td>3,300 mg/kg oral rat</td>
<td>NA</td>
</tr>
</tbody>
</table>
Important Notes for Import Licence

Further assistance, call SCDF
Mr Nasir @ 68481468
Mr Zali @ 68481465
Mr Mahaintharan @ 68481429
Import Control

- Any person who wishes to import any scheduled P & FM above exemption quantity will require a valid import licence.

- Criteria for application of import licence:
  - UEN
  - Storage Licence(s)

- Duration of licence is 1 year

- Import licence fee is $70 per year

Container, tank, freight container or road tank used for importation of P&FM shall be designed, constructed, maintained and labeled in accordance with an accepted code of practice specified by Commissioner.

Collection of imported petroleum and flammable materials:

- Importer, or an authorized agent shall take delivery at:
  - wharf if imported by water
  - air cargo terminal by air
  - Tuas Checkpoint (or such other place specified by Commissioner if Tuas Checkpoint is closed) by road
  - No P&FM shall be imported by rail
Important Notes for Transport Licence

Further assistance, call SCDF

Mr Nasir @ 68481468
Mr Zali @ 68481465
Mr Mahaintharan @ 68481429
Transport Control

Any person who wishes to transport any scheduled P&FM above the exemption quantities will require a valid transportation licence.

One transportation licence is issued per vehicle.

Criteria for application of transportation licence:

- **Vehicle:** Valid LTA roadworthiness test certificate & Fire Safety inspection test certificate

- **Tank (reports endorsed by P.E.):**
  - Manufacturer’s specifications and test reports
  - Hydrostatic or equivalent test report (every 5th yr)
  - Radiographic or equivalent test report (every 10th yr)

- **Driver:** Valid HazMat Transportation Driver Permit (HTDP)
- Transportation Emergency Response Plan
- QRA (if required)
- Consent letter from vehicle owner (if vehicle does not belong to applicant)
Important Notes for Storage Licence

Further assistance, call SCDF  
Mr Faizal @ 68481495
Mr Muhathir @ 68481442
Storage Control

Any person who wishes to store any scheduled P&FM above the exemption quantities will require a valid storage licence.

Criteria for application of storage licence:

- Approved Building Plan (include piping system, routing, fitting, pump eqpt)
- Temporary Fire Permit or Fire Safety Certificate
- Storage Tank certifications (endorsed by P.E.) including:
  - manufacturer’s specifications and test reports
  - hydrostatic or equivalent test report (every 5th year)
  - radiographic or equivalent test report (every 10th year)
  - pressure or equivalent test report for piping (every 5th year)
- Emergency Response Plan
- Checks of fire safety requirements by P.E. or Competent Person
Storage Control

- One storage licence is issued per premises (valid for 1 to 3 yrs)

- Licence is not transferable except with consent in writing of the Commissioner

- Application of storage licence is through Online Business Licensing Scheme (OBLS). A SingPass is required.
Important Notes

• For premises that do not store any P&FM above the exemption quantity, no P&FM storage licences are required.

• However, the following are still required:
  • Approved building plan of premise
  • Fire Safety Certificate
Important Notes for Pipeline Licence

Further assistance, call SCDF
Mr Kelvin @ 68481484
Ms Claire @ 68481735
Pipeline Control

- Pipeline licence issued is valid for 1 yr
- Licence is not transferable except with consent in writing of the Commissioner
- For application of pipeline licence, please refer to SCDF website.
Thank You