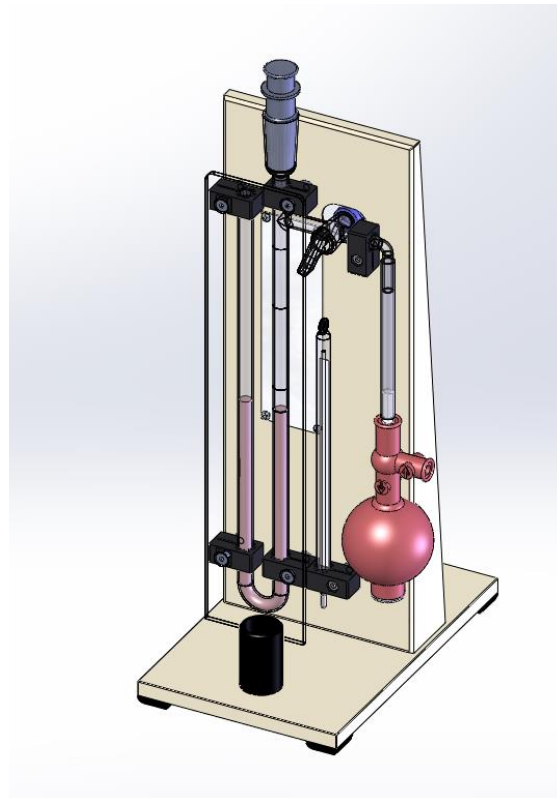


# Operating Manual

## Manual Blaine Air-Permeability Apparatus for determining the fineness of cement EN 196-6



**Importance of this Operating Manual:**

It is expected that Users and Operators read and understand this entire Operating Manual before putting the system into operation. Reading and understanding this entire Operating Manual is absolutely necessary before operating the system.

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Attachments:  
Safety Data Sheet of the liquid

## 1. General information

### 1.1 Purpose for which this system has been designed

This Blaine Apparatus has been designed only to determine the Blaine fineness of cement.

The User must by all means observe the requirements and limit values, as well as all safety instructions, given in this Operating Manual. Any use of this equipment not in conformity with these stipulations shall be considered to be in violation of the use for which this system was intended.




If this equipment must be operated under special conditions, or with special modes of operation, then this shall be authorized only after consultation with the Manufacturer, and after obtaining his prior and express approval.


### 1.2 Application for purposes for which the system was not intended

It may therefore NOT be used under such conditions or in connection with the following actions:

- Do not disassemble this system. Do not try to repair it or to modify it.
- The apparatus may not be operated in locations which are subject to the following conditions or substances: Ice formation, Heat radiation, Formation of condensation water, Dust, Corrosive gases, Vibrations, Severe physical impact (jolts), High relative humidity, Excessive temperature fluctuations
- Do not tamper with the liquid in the manometer. As recommended in the relevant standard. This liquid can cause serious health.

This operating manual contains safety instructions that are to be observed in order to exclude any risk of fatalities, injuries, damage to the equipment or improper operation. Safety markings are as follows:

Caution 	This warning refers to dangers that could cause material damage.
Danger 	This warning refers to dangers that could cause severe injuries or even fatalities.
Note 	Provides practical advice on operation

<p>Danger</p> 	<p>The mixing of cement with water causes the release of alkaline substances. In working with concrete, it is essential to take all necessary precautions to prevent dry cement from entering the eyes, mouth, or nose. Use protective clothing to prevent skin contact with wet cement or concrete. If cement or concrete enters the eyes, immediately and carefully wash out the eyes with clean water. Seek medical help without delay. If moist concrete comes into contact with the skin, wash it off immediately.</p>
	<p>The liquid in the manometer is Aeroshell fluid 41, as recommended in the relevant standard. This liquid can cause serious health. Please read the attachments for further information.</p>

### 1.3 Guarantee

Our General Terms of Sales and Delivery apply in all cases.

The Manufacturer guarantees that this Operating Manual has been prepared in conformity with the technical and functional parameters of the Blaine Apparatus as delivered. The Manufacturer reserves the right to add supplementary information to this Operating Manual.

The guarantee provided by the Manufacturer is the legal guarantee. This guarantee does not cover wear-and-tear parts.

The Manufacturer guarantees trouble-free operation only if the user observes the instructions in this Operating Manual, and only if the user employs the Blaine Apparatus for the purpose for which it is intended.

The Manufacturer shall not be liable for damages that may occur if the Blaine Apparatus is used for purposes for which it is not intended, or if the user does not observe the instructions and rules for operation as set forth in this Operating Manual.

No claims for damages may be lodged against the Manufacturer if the Blaine Apparatus is modified in its structural or constructional characteristics without the prior written consent of the Manufacturer, or if its functional characteristics are modified without such consent.

## **1.4 Acceptance of the product and transport**

### **1.4.1 Acceptance of the product**

When accepting delivery of the product, first inspect it for its outer, visible condition. If this inspection is satisfactory, the machine may be accepted from the freight forwarder (package service, courier, or other forwarding business).

If there are no shortcomings, and if there are no transport damages, then use the bill of delivery to make sure that the consignment is complete, and that all parts have been delivered.

If you assume or suspect transport damage, or if transport damage becomes apparent only after you have accepted the delivery, immediately make an exact report of the conditions and any damage as they exist. Send us this report immediately by fax or e-mail.

**Important:** Absolutely do not make any changes to the delivered goods.

After we have studied your report, we can make a decision whether we can correct the difficulties by one of the following options:

- Deliver spare parts to you, or
- Send a specialized fitter/installer to your plant, or
- Ask that you return the system to us for repair.

### **1.4.2 Transport**

This system will be delivered in the appropriate cardboard boxes. In order to prevent transport damage, the remaining hollow spaces in the interior of the boxes will be filled with bulk material.

This system can be moved by hand to the point at which it is to be operated. Its weight is approx. 3 kg.


## **2. Basic safety instructions**

### **2.1 Responsibility of the Users and Operators**

Only those persons may be permitted to operate the Blaine Apparatus alone (i.e., without supervision) who have met all of the following criteria:

- Persons who are at least eighteen (18) years of age, and
- Persons who have been instructed in the operation of the Blaine Apparatus, and
- Persons who have written authorization from the company to operate the Blaine Apparatus.

In the operation of the Blaine Apparatus, the person operating the instrument must take every precaution to ensure that he/she does not injure himself/herself or any other persons.

<p>Caution</p> 	<p>If any malfunction or other trouble is determined on the Blaine Apparatus, and if its faulty condition endangers its operational safety, then the Blaine Apparatus must be immediately taken out of operation. It may be put back into operation only after all sources of danger have been eliminated.</p>
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## 2.2 Danger in the use of the Blaine Apparatus

This Blaine Apparatus has been designed and built in accordance with the state of the engineering art and with the accepted rules of good engineering practice. The use of this Blaine Apparatus, however, can result in danger to life and limb of the Users and Operators and third parties, and can cause damage to the mechanical-engineering parts and other items of property.

This Blaine Apparatus may be used only:

- For the purposes for which it was intended, and
- If it is in completely satisfactory technical condition with regard to safety in its operation.

If there are any malfunctions or other trouble that could cause dangerous situations to arise in work with the Blaine Apparatus, these difficulties must be immediately corrected before working with the machine.

## 2.3 Protective clothing

The Operator must ensure that the personnel wear the respectively required protective clothing, such as:

Safety boots  
Suitable clothing  
Protective gloves  
If necessary respiratory protection


### 3. Scope of delivery

The scope of delivery of the Blaine Apparatus consists of the following components:

1 ea.	Air Permeability Tester, including measuring cell with piston, and sieve plates
50 ml	Filling oil
1 ea.	Cone grease
1 ea.	A funnel
1 unit	Round filter, $\varnothing$ 12.8 mm
1 ea.	A brush
1 ea.	A thermometer
1 ea.	A squeeze bulb and a flexible tube
1 ea.	Cone rubber stopper

Optional:

1 bottle	Calibration sand, coarse
1 bottle	Calibration sand, fine
	Official calibration performed by the Manufacturer (a service at extra cost)

<p>Note</p> 	<p>When the Model 1.0209 is delivered, it is NOT calibrated. If the customer requires, we can deliver the instrument with official calibration: as an option, for an additional price. <b>Important:</b> do not place the Blaine Apparatus into operation before it has been properly calibrated.</p>
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### 4. Technical data

#### Basic structural design

The measuring apparatus is mounted on a stable metal plate. A sturdy metal enclosure on the left side of the apparatus contains the U-shaped manometer tube. On the right side the U-tube is plugged with a squeeze bulb.



Applicable standard:	in accordance with the standard EN 196-6.
Dimensions:	130 mm long x 200 mm wide x 410 mm high
Weight:	approx. 3 kg

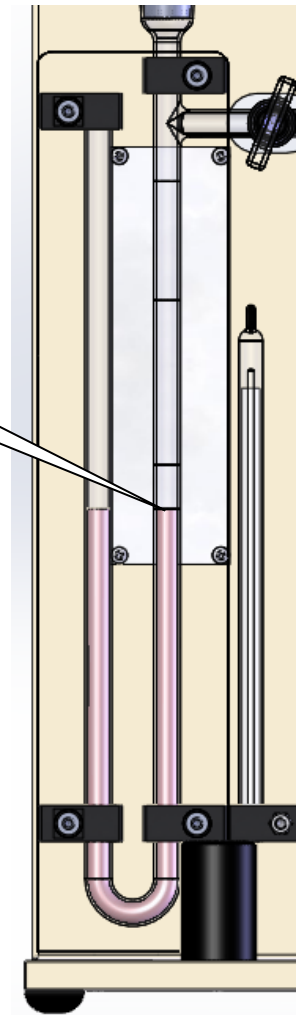
## 5. Putting the Blaine Apparatus into operation

Set up the Blaine Apparatus on a surface that is level, that is not subject to vibrations, and that can sufficiently support the weight of the apparatus. The ambient is according to EN 196-6.

The U-tube must be clean and dry before filling.  
Use the funnel and/or the injection with hose to pour the filling oil into the U-shaped tube.

Filling height

<p>Note</p> 	<p>Fill the oil up to the lowest mark. Fill the oil slowly and carefully, since the levels of the oil will adjust very slowly. If exceed the mark then use the injection with tube to suck out the surplus oil.</p>
<p>Caution</p> 	<p>Do not pour out the oil throught the cone. It could cause damage.</p>



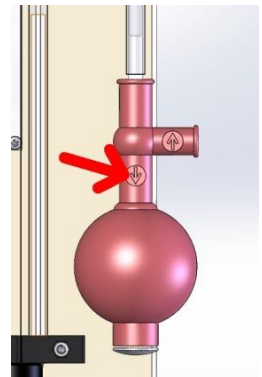
## 6. How to conduct the test


The cement bed must be prepared in the measuring cell in accordance with the instructions given in EN 196-6.

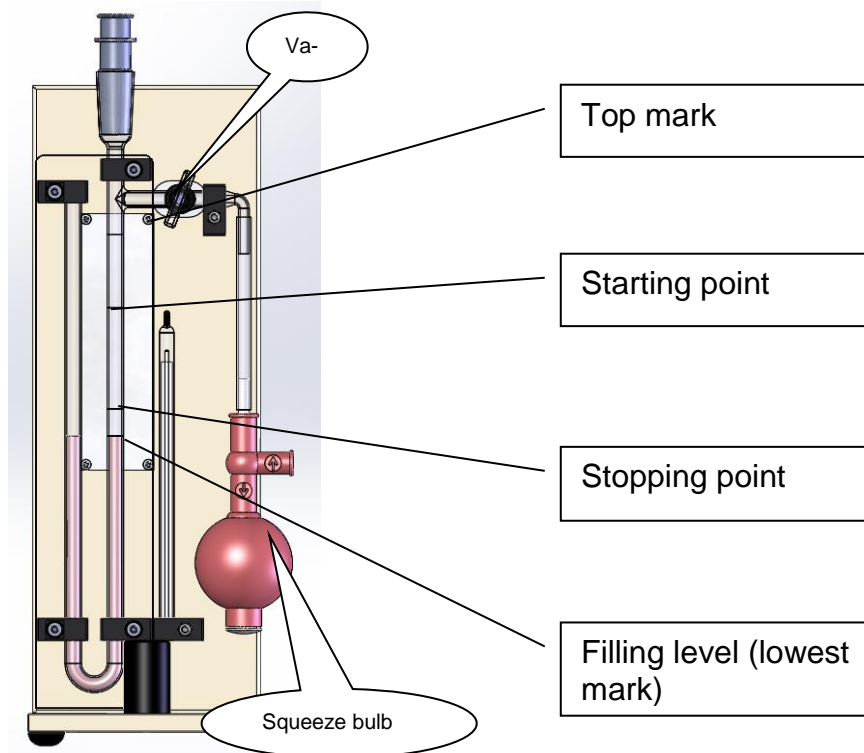
- Apply a thin layer of cone grease onto the cone. Place the measuring cell into the cone at the top of U-shaped tube.
- Be careful not to disturb the cement bed.
- Close the stopcock (vertical position)
- Use your hand to squeeze the rubber bulb together.
- Open the stopcock slowly (horizontal position)



- Gently press with the index finger and thumb together the valve of the squeeze bulb. Thus, the manometer fluid is pulled up to the top. Stop it when the manometer fluid has reached the top mark.
- Close the stopcock (vertical position)



<p>Achtung</p> 	<p>You should be aware that in case of rapid opening of the valve Manometer fluid could flow into the bulb and it could occurs inoperable.</p>
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- The oil level falls slowly.
- When the oil level reaches the starting point (see drawing), start the time measurement. When the oil level reaches the stopping point (see drawing), stop the time measurement.
- Note the time measured, and the room temperature.
- Now repeat the procedure by following the instructions given in EN 196-6.

## 7. Checking and maintenance

It is necessary to check the level of the filling oil and the pureness regularly. Please top up the oil to the proper level if required.

## 8. Troubleshooting

PROBLEM	CAUSE	SOLUTION
The measured values are not correct.	The constant for the apparatus is not correct.	Correctly determine the constant for the system.
	The calibration substance does not properly match the cement type.	Choose the proper calibration substance to correctly match the cement type.
	The volume data value are not correct.	Properly determine correct volume value.
	The measuring cell has not been properly attached, or it has not been turned correctly. There is a leak in the connection between the fittings.	Check the rubber seal itself, and its position in the measuring cell. Check the connection provided by the bayonet connector.

## 9. Shutting down the system for lengthy periods

If the Blaine Apparatus is scheduled to remain out of operation for a lengthy period of time, please cover the apparatus to protect it from dust

## 10. Scrapping

If the apparatus will not be used again, we recommend the following steps for scrapping:

- Disconnect the power cable from the power supply.
- Cover all sharp, protruding, or otherwise dangerous parts.

Disassemble the apparatus and scrap it in accordance with currently valid regulations.

The product and the packaging material are made from recyclable materials. The separate, environment friendly disposal of material residues promotes the recycling of reusable materials.

## 11. Spare parts and services

A great deal of care has been taken to ensure that this Operating Manual is correct. We cannot, however, guarantee that it is without mistakes or errors, or that all information contained herein will continue to remain valid in the event of technical changes.

### 11.1 Date of issue of this Operating Manual:

Version no. 11  
Dec. 2016

### 11.2 Copyright

The copyright to this Operating Manual is held by the following company:

**TESTING** Bluhm & Feuerherdt GmbH

This Operating Manual is provided only for the using company, and the staff of this company. The information in this Operating Manual may not be:

- Reproduced, or
- Distributed, or
- Provided to any other persons.

Any person acting in violation of the above stipulations may be prosecuted before a court of law.

### 11.3 Address for technical support and spare-parts ordering

If you have any technical questions, or if you require spare parts, please get directly in touch with the following address:

**TESTING Bluhm & Feuerherdt GmbH**

Motzener Str. 26b

DE – 12277 Berlin

Germany

Tel.: +49 30 (0) 7109645-0

Fax: +49 30 (0) 7109645-97

E-mail: [info@testing.de](mailto:info@testing.de)

[www.testing.de](http://www.testing.de)

## 12. Spare parts; ordering parts

<b>Order number:</b>	<b>Designation of spare parts:</b>	<b>Pack size:</b>
1.0209.01	Official calibration performed by the Manufacturer (a service at extra cost)	1
1.0209.02	Calibration sand (coarse)	1
1.0209.03	Calibration sand (fine)	1
1.0209.09	Filter paper, 12.8 mm diameter	1000
1.0209.05	Filling oil, 50 ml	1
1.0209.06	U-shaped tube	1
1.0209.07	Rubber squeeze bulb with rubber tube	1
1.0209-08	Cone grease	1
1.0209-20	Measuring cell	1
1.0209-22	Funnel	1
1.0209-23	Thermometer	1
1.0209-24	Brush	1

Material Safety Data Sheet

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

**Material Name :** Shell Tellus S2 V 15  
**Uses :** Hydraulic oil  
**Product Code :** 001D7747  
**Manufacturer/Supplier :** PT Shell Indonesia  
Talavera Office Park  
22nd-27th Floor  
22-26 Jl. Letjen TB Simatupang Kav.  
Jakarta Selatan 12430  
Indonesia  
**Telephone :** (+62) 2175924700  
**Fax :** (+62) 2175924679  
**Emergency Telephone Number :** (+62) 811 984 290

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**Preparation Description :** Highly refined mineral oils and additives.  
**Additional Information :** The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346.

**3. HAZARDS IDENTIFICATION**

**EC Classification :**  
**Health Hazards :** Not classified as dangerous under EC criteria.  
Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. High-pressure injection under the skin may cause serious damage including local necrosis. Used oil may contain harmful impurities.  
**Signs and Symptoms :** If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.  
**Safety Hazards :** Not classified as flammable but will burn.  
**Environmental Hazards :** Not classified as dangerous for the environment.

**4. FIRST AID MEASURES**

**Inhalation :** No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.  
**Skin Contact :** Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.  
**Eye Contact :** Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.  
**Ingestion :** If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (37° C), shortness of breath, chest congestion or continued coughing or wheezing.  
**Advice to Physician :** Treat symptomatically. Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential. Call a doctor or poison control center for guidance.

**5. FIRE FIGHTING MEASURES**

Clear fire area of all non-emergency personnel.  
**Specific Hazards :** Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.  
**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.  
**Protective Equipment for Firefighters** Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

**6. ACCIDENTAL RELEASE MEASURES**

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.  
**Protective measures :** Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.  
**Clean Up Methods :** 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.  
**Additional Advice :** Local authorities should be advised if significant spillages cannot be contained.

**7. HANDLING AND STORAGE**

**General Precautions :** Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. 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.

**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.

**Storage :** Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50 °C / 32 - 122 °F

**Recommended Materials :** For containers or container linings, use mild steel or high density polyethylene.

**Unsuitable Materials :** PVC.

**Additional Information :** Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

### Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA [Mist.]		5 mg/m3	
	ACGIH	STEL [Mist.]		10 mg/m3	
	ID OEL	NAB [Mist.]		5 mg/m3	

### Biological Exposure Index (BEI) - See reference for full details

Data not available

**Exposure Controls :** 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.

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

**Respiratory Protection :** No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point>65°C(149 °F)].

**Hand Protection :** 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, glove thickness, 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.

**Eye Protection :** Wear safety glasses or full face shield if splashes are likely to occur.

**Protective Clothing :** Skin protection is not required under normal conditions of use. It is good practice to wear chemical resistant gloves.

**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.

**Environmental Exposure Controls:** Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance :** Amber. Liquid at room temperature.

**Odour :** Slight hydrocarbon.

**pH :** Not applicable.

**Initial Boiling Point and Boiling Range :** > 280 °C / 536 °F estimated value(s)

**Pour point :** Typical -42 °C / -44 °F

**Flash point :** Typical 170 °C / 338 °F (COC)

**Upper / lower Flammability or Explosion limits:** Typical 1 - 10 %(V) (based on mineral oil)

**Auto-ignition temperature :** > 320 °C / 608 °F

**Vapour pressure :** < 0.5 Pa at 20 °C / 68 °F (estimated value(s))

**Specific gravity :** Typical 0.872 at 15 °C / 59 °F

**Density :** Typical 872 kg/m3 at 15 °C / 59 °F

**Water solubility :** Negligible.

**Solubility in other solvents :** Data not available

**n-octanol/water partition coefficient (log Pow) :** > 6 (based on information on similar products)

**Dynamic viscosity :** Data not available

**Kinematic viscosity :** Typical 15 mm2/s at 40 °C / 104 °F

**Vapour density (air=1) :** > 1 (estimated value(s))

**Evaporation rate (nBuAc=1) :** Data not available

**Decomposition Temperature:** Data not available

## 10. STABILITY AND REACTIVITY

**Stability :** Stable.

**Conditions to Avoid :** Extremes of temperature and direct sunlight.

**Materials to Avoid :** Strong oxidising agents.

**Hazardous Decomposition Products** Hazardous decomposition products are not expected to form during normal storage.

#### 11. TOXICOLOGICAL INFORMATION

<b>Basis for Assessment :</b>	Information given is based on data on the components and the toxicology of similar products.
<b>Acute Oral Toxicity :</b>	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat Aspiration into the lungs may cause chemical pneumonitis which can be fatal.
<b>Acute Dermal Toxicity :</b>	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
<b>Acute Inhalation Toxicity :</b>	Not considered to be an inhalation hazard under normal conditions of use.
<b>Skin Irritation :</b>	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
<b>Eye Irritation :</b>	Expected to be slightly irritating.
<b>Respiratory Irritation :</b>	Inhalation of vapours or mists may cause irritation.
<b>Sensitisation :</b>	Not expected to be a skin sensitiser.
<b>Repeated Dose Toxicity :</b>	Not expected to be a hazard.
<b>Mutagenicity :</b>	Not considered a mutagenic hazard.
<b>Carcinogenicity :</b>	Product contains mineral oils of types shown to be oncogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
<b>Reproductive and Developmental Toxicity</b>	Not expected to be a hazard.
<b>Additional Information :</b>	Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

#### 12. ECOLOGICAL INFORMATION

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.	
<b>Acute Toxicity :</b>	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
<b>Microorganisms :</b>	Data not available
<b>Mobility :</b>	Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
<b>Persistence/degradability :</b>	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
<b>Bioaccumulation :</b>	Contains components with the potential to bioaccumulate.
<b>Other Adverse Effects :</b>	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

#### 13. DISPOSAL CONSIDERATIONS

<b>Material Disposal :</b>	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.
<b>Container Disposal :</b>	Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
<b>Local Legislation :</b>	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

#### 14. TRANSPORT INFORMATION

<b>Land (as per ADR classification): Not regulated</b>	This material is not classified as dangerous under ADR regulations.
<b>IMDG</b>	This material is not classified as dangerous under IMDG regulations.
<b>IATA (Country variations may apply)</b>	This material is not classified as dangerous under IATA regulations.

#### 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.	
<b>EC Classification :</b>	Not classified as dangerous under EC criteria.
<b>EC Symbols :</b>	No Hazard Symbol required
<b>EC Risk Phrases :</b>	Not classified.
<b>EC Safety Phrases :</b>	Not classified.
<b>Chemical Inventory Status</b>	
<b>EINECS :</b>	All components listed or polymer exempt.
<b>TSCA :</b>	All components listed.

#### 16. OTHER INFORMATION

<b>R-phrases(s)</b>	Not classified.
<b>MSDS Version Number :</b>	1.0
<b>MSDS Effective Date :</b>	15.10.2010
<b>MSDS Revisions :</b>	A vertical bar ( ) in the left margin indicates an amendment from the previous version.
<b>MSDS Distribution :</b>	The information in this document should be made available to all who may handle the product.
<b>Disclaimer :</b>	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.