

## Material Safety Data Sheet

### 1. Identification of the substance/preparation and of the company/undertaking

<b>Product name</b>	<b>N1300</b>
<b>Product Use</b>	Viscosity Reference Standard.
<b>Supplier</b>	Poulten Selfe and Lee Ltd. - PSL Calibration Laboratory Russell House Burnham Business Park Burnham-on-Crouch Essex CM0 8TE United Kingdom
<b>Emergency telephone Number</b>	<b>+44 (0) 1621 787100</b>

### 2. Composition/information on ingredients

Highly refined mineral oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

<b>Product Trivial Name</b>	PIB. POLYISOBUTYLENE
<b>Product Formal Name</b>	BUTENE, HOMOPOLYMER
<b>Product Chemical Family</b>	Hydrocarbon polymer
<b>CAS Number</b>	9003 – 29 - 6

**This product does not contain any hazardous ingredients at above regulated thresholds.**

### 3. Hazards identification

Classification according to Regulation (EC) No. 1272/2008 [CLP]: This product is NOT classified as dangerous.

<b>Physical/chemical Hazards</b>	Not classified as dangerous.
<b>Human health hazards</b>	Not classified as dangerous.
<b>Environmental hazards</b>	Unlikely to be harmful to aquatic organisms.
<b>Effects and symptoms</b>	
Eyes	No significant health hazards identified.
Skin	No significant health hazards identified.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

### 4. First-aid measures

<b>Eye Contact</b>	In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin contact</b>	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration. Get medical attention if symptoms appear.
<b>Ingestion</b>	If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed- can enter lungs and cause damage. Drain stomach by gastric lavage under qualified medical

**Notes to physician**

supervision. Obtain medical attention immediately. Treatment should in general be symptomatic and directed to relieving any effects.

Most important symptoms and effects, both acute and delayed

<b>Symptoms/injuries after eye contact</b>	Hot material can cause burns.
<b>Symptoms/injuries after skin contact</b>	Hot material can cause burns.
<b>Symptoms/injuries after inhalation</b>	The product decreases available oxygen, causes suffocation.
<b>Symptoms/injuries after ingestion</b>	Ingestion may cause nausea and vomiting. Central nervous system depression. Convulsions. Death.

Indication of any immediate medical attention and special treatment needed

In case of burned skin, to minimize physical damage to skin, do not remove the product. Cover the injured with appropriate burn gel.

## 5. Fire-fighting measures

**Extinguishing Media**

**Suitable**

In case of fire, use water fog, foam, dry chemical or CO2 extinguisher or spray.

**Not Suitable**

Do not use a solid water stream as it may scatter and spread fire.

**Hazardous decomposition products**

These products are carbon oxides (CO, CO2).

**Unusual fire/explosion Hazards**

None identified.

**Special fire-fighting procedures**

None identified.

**Advice for fire-fighters**

Cool closed containers exposed to fire with water spray. In case of fire: Wear self-contained breathing apparatus.

## 6. Accidental release measures

For non-emergency personnel

**Protective equipment**

Wear protective clothing as described in Section 8. Wear suitable protective clothing.

**Emergency procedures**

Stop leak if safe to do so. Stay away from low ground with wind on your back. Clean up even minor leaks or spills if possible without unnecessary risk.

For emergency personnel

**Protective equipment**

Wear suitable protective clothing. In case of fire: wear self-contained breathing apparatus.

**Emergency procedures**

Eliminate leaks immediately. Stay away from low ground with wind on your back. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Do not discharge into drains or the environment.

**Containment and cleanup methods**

For containment: Eliminate leaks immediately. Ventilate affected area. For cleanup: Eliminate leaks immediately. Apply water mist to increase dispersion rate. Provide adequate ventilation. See Section 13 for Waste Disposal Information. Splash goggles.

**Personal Protection in Case of a Large Spill**

Full suit. Boots. Gloves.

## 7. Handling and storage

**Precautions for safe handling**

Product shall only be used by fully trained professional users that are knowledgeable on all hazards posed by it. Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid

<b>Handling</b>	contact with skin and eyes. To avoid the possibility of skin disorders, repeated or prolonged contact with products of this type must be avoided. It is essential to maintain a high standard of personal hygiene. Heating is not required or recommended for processing.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product.
<b>Technical measures</b>	Provide adequate ventilation.
<b>Storage</b>	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Bulk storage does not require any special measure. If product is held heated above 60°C the use of nitrogen blanket is recommended.
<b>Incompatible products</b>	Strong acids. Oxidizing agents, strong. Peroxides. Chlorates.
<b>Incompatible materials</b>	None known.

## 8. Exposure controls/personal protection

<b>Occupational Exposure Limits</b>	EH40-OES (United Kingdom) STEL: 10mg/m <sup>3</sup> 15 minute(s) Form: Oil mist, mineral TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: Oil mist, mineral
<b>Control Measures</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Hygiene Measures</b>	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
<b>Personal Protective Equipment</b>	<b>Gloves. Protective goggles. Protective clothing.</b>



<b>Respiratory System</b>	In case of inadequate ventilation, wear respiratory protection. Half-mask with filter according to EN 149.
<b>Skin and body</b>	When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection must be worn.
<b>Hands</b>	Wear suitable gloves tested to EN374.
<b>Eyes</b>	Wear chemical goggles if material is handled hot. Not required for normal conditions of use. DIN EN 166.

## 9. Physical and chemical properties

<b>Physical State</b>	Liquid
<b>Colour</b>	Amber
<b>Odour</b>	Mild
<b>Boiling point / range</b>	Above 250 °C
<b>Pour Point</b>	Below minus 18 °C
<b>Kinematic Viscosity</b>	220 cSt at 40 °C
<b>Flash Point</b>	Above 200 °C (closed)
<b>Autoignition</b>	Above 250 °C
<b>Explosive Properties</b>	Not determined
<b>Relative Density</b>	Below 1.0 at 20 °C
<b>Water Solubility</b>	Insoluble
<b>Fat Solubility</b>	Not determined

## 10. Stability and reactivity

<b>Stability</b>	Stable under normal conditions, hazardous polymerisation will not occur.
<b>Reactivity</b>	May react with strong acids or strong oxidizing such as chlorates and peroxides.
<b>Conditions to avoid</b>	Temperatures above 20 °C
<b>Materials to avoid</b>	Strong oxidising agents, strong acid.
<b>Hazardous Decomposition Products</b>	Heating this product up to 260°C may cause rapid depolymerization with production of extremely flammable isobutene vapors. Thermal combustion may release carbon monoxide and dioxide.

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## 11. Toxicological information

<b>Acute toxicity</b>	Not classified
<b>Butene, polymer with 2-methyl-1-propene (9044-17-1)</b>	
LD50 oral rat	> 34000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
LC50 inhalation rat (mg/l)	> 17 mg/m <sup>3</sup>
<b>Health Effects</b>	
<b>Eyes</b>	May cause transient irritation
<b>Skin</b>	Unlikely to cause harm on brief or occasional contact
<b>Inhalation</b>	Low volatility makes inhalation unlikely at ambient temperatures
<b>Ingestion</b>	May cause nausea, vomiting and diarrhoea
<b>Chronic</b>	Repeated and prolonged skin contact may lead to skin disorders
<b>Other</b>	None known

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## 12. Ecological information

<u>Toxicity</u>	
<b>Butene, polymer with 2-methyl-1-propene (9044-17-1)</b>	
LC50 fishes 1	> 1000 mg/l 96 hours (similar material)
EC50 Daphnia 1	> 1000 mg/l 48 hours (similar material)
<b>Persistence/degradability</b>	Not easily biodegradable
<b>Mobility</b>	Mobile liquid. Insoluble in water. Non-volatile. Not expected to move rapidly on water flows/surface due to the high viscosity and very low solubility.
<b>Bioaccumulative potential</b>	This product is bioaccumulate based on logP values of constituents.
<b>Environmental assessment</b>	When used and disposed of as intended, no adverse environmental effects are foreseen.
<b>Ecotoxicity</b>	Not expected to be toxic to aquatic organisms Not to be inhibitory to sewage bacteria.

This substance/mixture does not meet the PBT or the vPvB criteria of REACH, Annex XIII.


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## 13. Disposal considerations

<b>Disposal Consideration /</b>	Where possible, arrange for product to be recycled. Do not cut, grind, drill, weld, reuse or dispose off containers unless adequate precautions are taken against these hazards.
<b>Waste information</b>	Dispose of via an authorized person/ licensed waste disposal contractor in accordance with local and national regulations.

## 14. Transport information

In accordance with ADR, RID, IMDG, IATA, ADN.

<b>UN number</b>	
<b>UN-No (ADR, IATA, IMDG, ADN)</b>	3257
<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, N.O.S.
<b>Transport document description</b>	UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S., 9, III, (D)
<b>Transport hazard classes</b>	
<b>Class (UN, IATA, IMDG, ADN)</b>	9
<b>Classification code</b>	M9
<b>Hazard labels (UN)</b>	9
	
<b>Packing group (UN)</b>	III
<b>Environmental hazards</b>	
<b>Dangerous for the environment</b>	No
<b>Marine Pollutant</b>	No
<b>Overland transport</b>	
<b>Hazard identification number (Kemler No)</b>	99
<b>Classification code (UN)</b>	M9
<b>Special provision (ADR)</b>	274, 580, 643
<b>Transport category (ADR)</b>	3
<b>Tunnel restriction code</b>	D
<b>Limited quantities (ADR)</b>	0
<b>Excepted quantities (ADR)</b>	E0
<b>EAC code</b>	2Y

No additional information available on transport by sea, air, inland waterway.

## 15. Regulatory information

This product is NOT classified as dangerous for supply in the UK

No REACH Annex XVII restrictions.

### Hazard label Data

<b>EC Directives</b>	Waste Oil Directive, 87/101/EEC Framework Waste Directive, 91/156/EEC
<b>Statutory Instruments</b>	Health & Safety at Work, etc. Act 1974 Consumer Protection Act 1987 Environmental Protection Act 1990
<b>Codes of Practice</b>	Waste Management. The Duty of Care
<b>Guidance Notes</b>	Occupational exposure limits (EH40) Carcinogenicity of mineral oils (EH 58)

Skin cancer caused by oil [MS(B)5]  
 Save your skin! – Occupational Contact Dermatitis [MS(B)6]  
 Dermatitis – cautionary notice [SHW 367]  
 Effects of mineral oil on the skin [SHW 397]

The above publications are available from HMSO or HSE

Compliance with Regulation (EC) 1907/2006 as amended, Regulation (EC) 1272/2008 as amended, Directive 1999/EC as amended, Directive 67/548/EEC as amended.

## 16. Other information

**HMIS rating:**

**Health hazard: 0**  
**Chronic health hazard**  
**Flammability: 0**  
**Physical hazard: 0**

**NFPA rating:**

**Health hazard: 0**  
**Fire hazard: 0**  
**Reactivity hazard: 0**

### Abbreviations and acronyms

**ADN** = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
**ADR** = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
**ATE** = Acute Toxicity Estimate  
**BCF** = Bioconcentration Factor  
**CAS** = Chemical Abstracts Service  
**CLP** = Classification, Labelling and Packaging Regulations [Regulation (EC) No. 1272/2008]  
**CSA** = Chemical Safety Assessment  
**CSR** = Chemical Safety Report  
**DMEL** = Derived Minimal Effect Level  
**DNEL** = Derived No Effect Level  
**DPD** = Dangerous Preparations Directive [1999/45/EC]  
**DSD** = Dangerous Substances Directive [67/548/EEC]  
**EINECS** = European Inventory of Existing Commercial chemical Substances  
**ES** = Exposure Scenario  
**EUH Statement** = CLP-specific Hazard Statement  
**EWC** = European Waste Catalogue  
**GHS** = Globally Harmonized System of Classification and Labelling of Chemicals  
**IATA** = International Air Transport Association  
**IBC** = Intermediate Bulk Container  
**IMDG** = International Maritime Dangerous Goods  
**LogPow** = Logarithm of the octanol/water partition coefficient  
**MARPOL 73/78** = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
**OECD** = Organisation for Economic Co-Operation and Development  
**PBT** = Persistent, Bioaccumulative and Toxic  
**RID** = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
**RRN** = REACH Registration Number  
**SADT** = Self-Accelerating Decomposition Temperature  
**SVHC** = Substances of Very High Concern  
**STOT-RE** = Specific Target Organ Toxicity – Repeated Exposure  
**STOT-SE** = Specific Target Organ Toxicity – Single Exposure  
**TWA** = Time Weighted Average  
**UN** = United Nations  
**UVCB** = Complex Hydrocarbon Substance  
**VOC** = Volatile Organic Compound  
**vPvB** = *Very Persistent and Very Bioaccumulative*

*The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. You should not use the product other than for the stated application or applications without seeking advice from us. If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet. If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken. Further copies of this Safety Data Sheet may be obtained from Poulten Selfe & Lee Ltd.*