



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

Product name	LAWS (Low Aromatic White Spirits)
SDS no.	0000003848
Use of the substance/mixture	Used in paint manufacturing and rubber industries, and as a solvent in various other applications. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Synonyms	Mineral Turpentine
Supplier	BP Southern Africa (Pty) Ltd 10 Junction Road Parktown, Johannesburg South Africa
EMERGENCY TELEPHONE NUMBER	+27 11 488 5111 (South Africa) +258 21 357 348 (Mozambique)
OTHER PRODUCT INFORMATION	0860 222 456
E-mail address	MSDSadvice@bp.com

2. Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Physical/chemical hazards	Flammable.
Human health hazards	May cause cancer. May cause heritable genetic damage. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Additional hazards	Contains Benzene. Prolonged or repeated exposure to benzene can cause anaemia and other blood diseases, including leukaemia. This material may contain significant quantities of polycyclic aromatic hydrocarbons (PCAs), some of which have been shown by experimental studies to induce skin cancer.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

3. Composition/information on ingredients

white spirit

South Africa

Chemical name	CAS no.	%	EINECS / ELINCS.	Classification
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	50 - 100	265-185-4	R10 Xn; R65 R66, R67 N; R51/53
Benzene	71-43-2	1 - 5	200-753-7	F; R11 Carc. Cat. 1; R45 Muta. Cat. 2; R46 T; R48/23/24/25 Xn; R65 Xi; R36/38

See Section 16 for the full text of the R-phrases declared above.

Occupational exposure limits, if available, are listed in Section 8.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.

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Date of issue 20 March 2013

Format South Africa
(South Africa)

Language ENGLISH
(ENGLISH)

Inhalation	Get medical attention immediately. If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If exposure to vapour, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.
Ingestion	Get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Extinguishing media

Suitable In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable Do not use water jet.

Hazardous decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Unusual fire/explosion hazards

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Special fire-fighting procedures

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Move containers from fire area if this can be done without risk. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is toxic to aquatic organisms. Use water spray to keep fire-exposed containers cool.

Protection of fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions - For non-emergency personnel

Eliminate all ignition sources. Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Ensure good ventilation. Put on appropriate personal protective equipment.

Personal precautions - For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Storage tanks must be positioned within a bunded area. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Large spill

Eliminate all ignition sources. Immediately contact emergency personnel. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

7. Handling and storage

Handling - Protective measures

Put on appropriate personal protective equipment. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid contact of spilt material and runoff with soil and surface waterways. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Do not reuse container. Empty containers retain product residue and can be hazardous.

Handling - Advice on general occupational hygiene

Storage

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Entry to any tanks or other confined space requires a full risk assessment and appropriate control measures to be put in place in conformance with appropriate regulations and industry practice on confined space entry. Explosive air/vapour mixtures can occur, particularly in unventilated or confined spaces. If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.

Eliminate all ignition sources. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Separate from oxidising materials. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store in a segregated and approved area. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Occupational exposure limits

This product does not have any assigned OELs.

Ingredient name

Occupational exposure limits

South Africa

Naphtha (petroleum), hydrodesulfurized heavy

DOL OEL (South Africa).

TWA: 575 mg/m³ 8 hours. Issued/Revised: 8/1995

TWA: 100 ppm 8 hours. Issued/Revised: 8/1995

STEL: 720 mg/m³ 15 minutes. Issued/Revised: 8/1995

STEL: 125 ppm 15 minutes. Issued/Revised: 8/1995

Benzene

DOL OEL (South Africa).

TWA: 16 mg/m³ 8 hours. Issued/Revised: 8/1995

TWA: 5 ppm 8 hours. Issued/Revised: 8/1995

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection

Use with adequate ventilation.

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Hand protection

Wear chemical resistant gloves.

Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture).

Do not re-use gloves.

Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis.

The frequency of replacement will depend upon the circumstances of use.

Eye protection

Chemical splash goggles.

Skin and body

Wear suitable protective clothing.
Footwear highly resistant to chemicals.
When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.
Refer to standard: ISO 11612
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.
Refer to standard: EN 1149
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination.
Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.
When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.

9 . Physical and chemical properties

General information

Appearance

Physical state	Liquid.
Colour	Colourless.
Odour	Paraffinic

Important health, safety and environmental information

Flash point	Closed cup: 40°C (104°F) [Based on Abel]
Auto-ignition temperature	240°C (464°F)
Explosion limits	Lower: 0.7% Upper: 6.5%
Vapour pressure	0.399 kPa (3 mm Hg) at 20°C
Evaporation rate	0.19 (butyl acetate = 1)
Viscosity	Kinematic: 1.08 mm ² /s (1.08 cSt) at 25°C
Boiling point / range	159 to 191°C (318.2 to 375.8°F)
Density	780 kg/m ³ (0.78 g/cm ³) at 15°C
Solubility	insoluble in water.
Partition coefficient (LogKow)	3.7 to 6.7

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid excessive heat.
Materials to avoid	Reactive or incompatible with the following materials: oxidising materials
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Effects and symptoms

Eyes	May cause eye irritation. Potential risk of transient stinging or redness if accidental eye contact occurs. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes. Vapour, mist or fume may cause eye irritation.
Skin	May cause skin irritation. As with all such products containing potentially harmful levels of PCAs, prolonged or repeated skin contact may eventually result in dermatitis or more serious irreversible skin disorders including cancer.
Inhalation	Vapours may cause drowsiness and dizziness. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs. Vapour, mist or fume may irritate the nose, mouth and respiratory tract.
Ingestion	If swallowed, may irritate the mouth, throat and digestive system. If swallowed, may cause abdominal pain, stomach cramps, nausea, vomiting and diarrhoea.
Chronic effects	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Vapour, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer.
Carcinogenic effects	May cause cancer. Risk of cancer depends on duration and level of exposure. May cause cancer. Exposure to benzene may result in effects to the hematopoietic system causing blood disorders including anaemia and leukaemia. Benzene is classified by EEC as a category 1 carcinogen - substances known to be carcinogenic to man. IARC assessment: benzene - carcinogenic to humans (Group 1)
Mutagenic effects	May cause heritable genetic damage.

12 . Ecological information

Environmental hazards

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13 . Disposal considerations








Disposal considerations / Waste information

The generation of waste should be avoided or minimised wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers.

Special precautions

14 . Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
ADR/RID Classification	UN1300	Turpentine substitute (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, (2-25%) aromatics, Benzene)	3	III	 	Hazard identification number 30 Tunnel code D/E
ADN Classification	UN1300	Turpentine substitute (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, (2-25%) aromatics, Benzene)	3	III	 	Remarks Table: C. Danger: 3+N2+F
IMDG Classification	UN1300	Turpentine substitute (Naphtha (petroleum), hydrodesulfurized heavy, Benzene). Marine pollutant	3	III	 	Emergency schedules (EmS) F-E, S-E
ICAO/IATA Classification	UN1300	Turpentine substitute (Naphtha (petroleum), hydrodesulfurized heavy, Benzene)	3	III		-

PG* : Packing group

ADR/RID Classification code: F1

ADN Classification code: F1

15 . Regulatory information

Label requirements

Hazard symbol or symbols



Dangerous for the environment

Indication of danger

Risk phrases

R10- Flammable.
R45- May cause cancer.
R46- May cause heritable genetic damage.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

S53- Avoid exposure - obtain special instructions before use.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Contains

Benzene

Restrictions on the Marketing and Use Directive

Restricted to professional users.

Other regulations

REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
National regulations	National legislation: Occupational Health and Safety Act (Act 85 of 1993).

16 . Other information

Full text of R-phrases referred to in sections 2 and 3	<p>R11- Highly flammable. R10- Flammable. R45- May cause cancer. R46- May cause heritable genetic damage. R48/23/24/25- Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R65- Also harmful: may cause lung damage if swallowed. R36/38- Irritating to eyes and skin. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapours may cause drowsiness and dizziness. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
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History

Date of issue/ Date of revision	20/03/2013.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship

Notice to reader

✔ Indicates information that has changed from previously issued version.

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.