



***TAG SOLVENT PRODUCTS (PTY)LTD.***  
***MATERIAL SAFETY DATA SHEET***  
***TAGSOL BE***

**1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Common name</b>	: Tagsol BE
<b>Supplier</b>	: TAG Solvent Products Mallet Road/Weg Knights Germiston 1401 Republic of South Africa TEL: +27 11 822-1600
<b>Synonym</b>	: Butyl Glycol Ether (BGE), Ethylene Glycol Mono Butyl Ether
<b>Trade name</b>	: Tagsol BE

**2 COMPOSITION / INFORMATION ON INGREDIENTS**

Name	CAS#
Tagsol BE	111-76-2

**3 HAZARDS IDENTIFICATION**

<b>Physical state and appearance</b>	: Liquid.
<b>Emergency overview</b>	: WARNING! FLAMMABLE LIQUID AND VAPOUR. VAPOUR MAY CAUSE FLASH FIRE.  Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Routes of entry</b>	: Eye contact. Ingestion. Inhalation. Skin contact.
<b>Potential acute health effects</b>	<p><b>Eyes</b>: : Hazardous in case of eye contact. Liquid, mist or vapour at high concentrations will cause conjunctival irritation and corneal damage.</p> <p><b>Skin</b>: : May cause skin irritation. Vapour may be absorbed through the skin, in toxicological amounts.</p> <p><b>Inhalation</b>: : Hazardous in case of inhalation. Causes irritation of the nose, throat, respiratory tract, and headaches. High concentrations may cause severe nose, throat and respiratory tract irritation, loss of consciousness, kidney or liver damage.</p> <p><b>Ingestion</b>: : Hazardous in case of ingestion. A large dose may cause gastrointestinal irritation, nervous system depression, liver and kidney damage and loss of consciousness</p>
<b>Potential chronic health effects</b>	: CARCINOGENIC EFFECTS: Not listed. MUTAGENIC EFFECTS: Not listed. TERATOGENIC EFFECTS: Not listed

<b>4</b>	<b>FIRST AID MEASURES</b>
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<b>Eye contact</b>	: Check for and remove any contact lenses. Immediately flush the eyes with running water for at least 10 minutes, keep eyelids open. Cold water may be used. Get medical attention if soreness or redness persists.
<b>Skin contact</b>	: In the case of contact, flush the skin with plenty of water for at least 10 minutes while removing the contaminated clothing and shoes (as washing continues). Cold water may be used. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention urgently.
<b>Inhalation</b>	: If inhaled, remove to fresh air. If not breathing apply artificial respiration. If breathing is laboured, give oxygen. Get medical attention.
<b>Ingestion</b>	: DO NOT induce vomiting unless directed to do so by medical personnel. Wash out mouth. Keep warm and at rest Have victim drink 240-300ml of water to dilute stomach contents. Get medical attention urgently.
<b>Notes to physician</b>	: Support respiratory and cardiovascular function.

<b>5</b>	<b>FIRE FIGHTING MEASURES</b>
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<b>Flammability of the product</b>	: Flammable
<b>Auto-flammability</b>	: 238°C
<b>Flash points</b>	: OPEN CUP: 66°C - CLOSED CUP 62°C
<b>Explosion limits</b>	: LOWER: 0.7% UPPER: 12.7%
<b>Products of combustion</b>	: These products are carbon oxides (CO, CO <sub>2</sub> )
<b>Fire hazards in presence of various substances</b>	: Flammable in the presence of direct sunlight, open flames and sparks, of high temperatures and strong oxidizing materials.
<b>Fire fighting media and instructions</b>	: Use alcohol foam. Use DRY chemical powder or carbon dioxide. Keep surrounding containers and area cool with water sprays.
<b>Protective clothing (fire)</b>	: Be sure to use an approved/certified respirator or equivalent.

<b>6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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<b>Personal precautions</b>	: Wear appropriate protective clothing. Wear respiratory protection. Eliminate all sources of ignition.
<b>Environmental precautions</b>	: Try to prevent material from entering drains and water sources. Advise authorities if spillage has entered a water source or sewer or has contaminated soil or vegetation.
<b>Spillages</b>	: Contain and absorb using earth sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush the area with plenty of water.

<b>7</b>	<b>HANDLING AND STORAGE</b>
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<b>Handling</b>	: Keep away from heat sparks and flame. Keep container closed when not in use. Use only with adequate ventilation.
<b>Storage</b>	: Storage area should be dry and cool. Suitable storage materials are: mild steel, polypropylene. Where trace iron contaminated or slight discoloration is critical, store in coated mild steel. Do not store in galvanized mild steel, copper and its alloys. For gaskets and seals use butyl rubber PTFE.

<b>8</b>	<b>EXPOSURE CONTROLS, PERSONAL PROTECTION</b>
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<b>Occupational exposure standards</b>	: None assigned.
<b>Engineering controls</b>	: Exposure to this material may be controlled in a number of ways. The measures appropriate for a particular worksite depend on how the material is used and on the potential for exposure. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure mechanical ventilation (dilution and local exhaust) and control process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.
<b>Personal protection</b>	
<b>Eyes</b>	: Chemical Splash goggles.
<b>Body</b>	: Chemical resistant protective suite.
<b>Respiratory</b>	: Vapour respirator. Be sure to use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	: PVC or rubber gloves.
<b>Feet</b>	: Chemical resistant safety boots.
<b>Protective clothing</b>	: Splash goggles. Full chemical resistant protective suit. Vapor respirator. Butyl gloves. Chemical resistant boots.
<b>Personal protection in case of large spills</b>	: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling the product.

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Physical state and appearance</b>	: Liquid.
<b>Colour</b>	: Colourless. Clear.
<b>Odor</b>	: Characteristic. Faint.
<b>Boiling/condensation point</b>	: 170°C
<b>Melting/freezing point</b>	: -70.4°C
<b>Evaporation rate</b>	: n Butac =1 0.07
<b>Vapor pressure</b>	: 0.002 kPa (@20 °C)
<b>Density</b>	: 0.903 ( Water = 1)
<b>Relative vapour density</b>	: 4.1 (Air = 1)
<b>Viscosity</b>	: 6,61(@20 °C)

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
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<b>Stability and reactivity</b>	: The product is stable under normal conditions.
<b>Conditions to avoid</b>	: High temperatures (Heat), exposure to direct sunlight.
<b>Incompatibility with various substances or materials</b>	: Reactive with strong oxidizing agents.
<b>Hazardous decomposition products</b>	: No data available

<b>11</b>	<b>TOXICOLOGICAL INFORMATION</b>
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<b>Acute toxicity</b>	: Low order of acute toxicity. Oral LD50 (rat) 470mg/Kg. Dermal LD50 (rabbit) 220mg/Kg.
<b>Irritancy</b>	<b>Eyes</b> : The eye irritancy has been investigated by OECD Testy Method 405. Single application to the rabbit's eye produced conjunctival irritation and corneal damage (epithelial and stromal). <b>Skin</b> : The skin irritancy has been investigated by OECD Test Method 404. Single application to intact rabbit skin produced minimal signs of irritation (mean scores for erythema or oedema less than 2).
<b>Sub-acute/subchronic toxicity</b>	: There are no reports of adverse long-term effects following repeated exposure.
<b>Chronic toxicity/carcinogenicity</b>	: No relevant studies identified.
<b>Genotoxicity</b>	: The product did not exhibit any mutagenic or clasogenic activity in a variety of bacterial and mammalian systems in vitro.
<b>Reproductive/developmental toxicity</b>	: Male and female rats were administered oral doses of Tagsol BE up to 1000mg/kg/day prior to mating with untreated animals. This study did not reveal any significant effects on either the male or female reproductive systems. There was no evidence of foetotoxicity or taratogenicity when Tagsol BE was administered as a aqueous solution to the skin of pregnant rabbits at dose levels up to 1000 mg/kg/day.

<b>12</b>	<b>ECOLOGICAL INFORMATION</b>
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<b>Ecotoxicity</b>	: The product is rated non-hazardous to aquatic species. Tests on the following species gave 96h LC50 of 2000 mg/L (Island silverside). Tests on the following species gave 24h LC50 of 2700 mg/L (goldfish). Tests on the following species gave 96h LC50 of 1300 mg/L (bluegills). Tests on the following species gave 48h NOEC of >100 mg/L (daphnia). Tests on the following species gave 24h NOEC of >100 mg/L (algae).
<b>Mobility</b>	: The product is involatile and water-soluble. The product is likely to volatilize from soil, but only slowly from water. The product is poorly absorbed into soil or sediments.
<b>Bio-accumulation</b>	: Product is not expected to bioaccumulate. Predicted bioconcentration factor = 4.
<b>Persistence/Degradability</b>	: The product is readily biodegradable BOD 28 = 92% of ThOD.

**13 DISPOSAL**

<b>Product disposal</b>	: Incineration. Dispose of in accordance with all applicable local and national regulations. If correctly incinerated this material will decompose to carbon dioxide and water only.
<b>Container disposal</b>	: Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near the container. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. After cleaning, all existing labels should be removed.

**14 TRANSPORT INFORMATION**

<b>UK Transport information</b>	UK Transport Classification. Not classified.
<b>UN Class</b>	Not classified.
<b>ADR/RID – class</b>	Not classified.
<b>IMDG – class</b>	Not classified.
<b>IATA - class</b>	Not classified.

**15 REGULATORY INFORMATION**

<b>Labeling Information</b>	: <input type="checkbox"/> irritant
<b>R phases</b>	: R36 Irritating to eyes
<b>S phases</b>	: S2 Keep out of reach of children S26 In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>EINECS Number</b>	: 203-961-6
<b>EC Annex I Number</b>	: 603-096-00-8
<b>EC Annex I Classification</b>	: Irritant
<b>MITI Number</b>	: 2-422 7-97
<b>TSCA Listing</b>	: Yes
<b>AICS/NICNAS Listing</b>	: Yes
<b>DSL/NDSL (Canadian) Listing</b>	: DSL listed

**15 OTHER INFORMATION**

<b>UK Legislation</b>	: Health and safety at Work etc Act, 1974 and relevant Statutory Provisions. Management of Health and safety at Work Regulations, 1992. Control of Substances Hazardous to Health (COSHH) Regulations, 1988. Chemicals (Hazard Information and Packaging for Supply) Amendment Regulations, 1996.
<b>UK further detailed guidance (current editions)</b>	: HS (G) 65, Successful Health and Safety Management, HSE. Approved Code of Practice – Management of Health and safety at Work, HSE. General Approved Code of Practice to COSHH Regulations, HSE. HS (G) 97, Step by Step Guide to COSHH Regulations, HSE. EH40. Occupational Exposure Limits, HSE. Revised Annually, EH42. Monitoring Strategies for Toxic Substances HSE, EH26 Occupational Skin Diseases Health and Safety Precautions, HSE. EH44, Dust in the Work Place. General Principles of Protection, HSE. HS (G) 37, An Introduction to Local Exhaust Ventilation, HSE. HS (G) 53, Respiratory Protective Equipment – a Practical Guide for Uses, HSE.
<b>References</b>	: Toxicity review 10: Glycol Ethers, 1985

**Notice to reader:**

This MSDS summarizes at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product, and in particular how to safely handle, use and transport the product in the workplace. Since TAG Solvent Products (PTY) LTD. and its subsidiaries cannot anticipate or control the conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review MSDS in the context of how the user intends to handle, use, store or transport the product in the workplace and beyond, and communicate such information to all relevant parties. If clarification or further information is required to ensure that an appropriate assessment can be made, the user should contact the company.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. In such event our liability shall be limited only to direct damages suffered. Our responsibility for the product as sold is subject to our standards terms and conditions, a copy of which is sent to our customers and is also available upon request. All risk with possession and application of the product passes on delivery.