Material Safety Data Sheet



1. Identification of the material and supplier

Product name Anvol WG 46

SDS no. 453017

Product use Fire-resistant hydraulic fluid.

For specific application advice see appropriate Technical Data Sheet or consult our company

representative.

Supplier Castrol Australia Pty Ltd

Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321

EMERGENCY TELEPHONE

NUMBER

+61 2801 44558 (or 1800 14 14 74 within Australia)

OTHER PRODUCT INFORMATION

Technical Help Line 1 300 557 998 (Local Call)

Product code 453017-AU07

2. Hazards identification

Statement of HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

hazardous/dangerous nature

Risk phrases R22- Harmful if swallowed

Safety phrases S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28- After contact with skin, wash immediately with plenty of soap and water. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container

or label

3. Composition/information on ingredients

Synthetic lubricant and additives in aqueous solution.

Ingredient nameCAS no.%ethanediol107-21-120 - 50

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

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. Remove contaminated

clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical

attention if irritation develops.

Inhalation Get medical attention immediately. If inhaled, remove to fresh air. It may be dangerous to the person

providing aid to give mouth-to-mouth resuscitation. In case of inhalation of decomposition products in

a fire, symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours.

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. Get medical attention urgently informing the doctor that a product containing ethylene glycol has been ingested and specific treatment may be required (see Advice to physicians). If hospital facilities or medical assistance are NOT immediately

available:

If contamination of the mouth occurs, wash out thoroughly with water. If larger amounts are swallowed and hospital facilities or medical assistance are not immediately available, induce vomiting if the casualty is fully conscious. Never attempt to induce vomiting in an unconscious or semi-conscious patient. Transport casualty together with the product container, its label or the safety data sheet urgently to hospital. Inform the doctor that a product containing ethylene glycol has been ingested.

Product name Anvol WG 46 Product code 453017-AU07 Page: 1/5

Version 3 Date of issue 8 February 2012 Format Australia Language ENGLISH

(Australia) (ENGLISH)

Advice to doctor Treatment should in general be symptomatic and directed to relieving any effects.

Fire-fighting measures

Extinguishing media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or

Not suitable Do not use water jet.

Hazardous decomposition

products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

Unusual fire/explosion

Special fire-fighting

hazards

procedures

In a fire or if heated, a pressure increase will occur and the container may burst.

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.

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.

Accidental release measures

Personal precautions 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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. **Environmental precautions**

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways,

Large spill 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. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated

absorbent material may pose the same hazard as the spilt product.

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-**Small spill** soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an

appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling Put on appropriate personal protective equipment. Do not breathe vapour or mist. Do not ingest.

Avoid contact with eyes, skin and clothing. 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. Do not reuse container. Empty

containers retain product residue and can be hazardous.

Storage Store and use only in equipment/containers designed for use with this product. 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. Store in accordance with local regulations. Store in a dry, cool and well-

ventilated area, away from incompatible materials (see Section 10).

Exposure controls/personal protection

Ingredient name Occupational exposure limits

ethanediol Safe Work Australia (Australia). Absorbed through skin.

TWA: 10 mg/m³ 8 hour(s). Issued/Revised: 8/2005 Form: Particulate STEL: 104 mg/m³ 15 minute(s). Issued/Revised: 8/2005 Form: Vapor STEL: 40 ppm 15 minute(s). Issued/Revised: 8/2005 Form: Vapor TWA: 52 mg/m3 8 hour(s). Issued/Revised: 8/2005 Form: Vapor TWA: 20 ppm 8 hour(s). Issued/Revised: 8/2005 Form: Vapor

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided

for guidance purposes

Biological Limit Values No biological limit allocated.

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.

Product name Anvol WG 46 Product code 453017-AU07 Page: 2/5

Version 3 Date of issue 8 February 2012 Format Australia Language ENGLISH (Australia) (ENGLISH) **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

Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter

capacity and respirator type depends on exposure level.

Skin and body Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated

contact is likely

Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. **Hand protection**

Recommended: Butyl gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the

supplier/manufacturer and with a full assessment of the working conditions.

Eye protection Safety glasses with side shields.

Physical and chemical properties

Physical state Liquid Colour Red

Odour Not available.

>200 °C (Closed cup) Pensky-Martens. Flash point

Vapour pressure Not available. Vapour density Not available

Viscosity Kinematic: 46 mm²/s (46 cSt) at 40°C

На

Boiling point / range Not available. Melting point / range Not available. Relative density/Specific Not available.

gravity

1090 kg/m3 (1.09 g/cm3) at 15°C **Density**

Solubility Soluble in water.

10. Stability and reactivity

Stability The product is stable.

Conditions to avoid Avoid extreme temperatures, strong oxidizers, fire.

Incompatibility with various substances/Hazardous

Reactions

Hazardous decomposition

products

carbon dioxide carbon monoxide

nitrogen oxides

11. Toxicological information

Effects and symptoms

No significant health hazards identified. Eyes

Skin Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Inhalation Inhalation causes headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Reactive or incompatible with the following materials: oxidising materials.

Decomposition products may include the following materials:

Ingestion Harmful if swallowed

Chronic toxicity

Carcinogenic effects No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by

ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or

the National Occupational Health and Safety Commission (Australia).

Mutagenic effects No known significant effects or critical hazards.

Product name Anvol WG 46 Product code 453017-AU07 Page: 3/5

Version 3 Date of issue 8 February 2012 Format Australia Language ENGLISH (Australia) (ENGLISH)

12 . Ecological information

Ecotoxicity Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying

Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].

Biodegradability

Persistence/degradability

The biodegradability of this material has not been determined.

Mobility

Liquid. Soluble in the following materials: water.

Bioaccumulative potential This product is not expected to bioaccumulate through food chains in the environment.

13. Disposal considerations

Disposal considerations / **Waste information**

The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration

No additional special precautions identified.

14. Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user

No known special precautions required. See Section: "Handling and storage" for additional

information

15 . Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Consumer products - This material is a scheduled poison and must be stored, maintained and used in accordance with the relevant regulations. Industrial Products - Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSHC National Code of Practice for labelling of workplace substances.

Control of Scheduled Carcinogenic Substances

Ingredient name **Schedule**

No Listed Substance

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. All components are listed or exempted.

Canada inventory China inventory (IECSC) All components are listed or exempted. Japan inventory (ENCS) Korea inventory (KECI)

All components are listed or exempted. All components are listed or exempted.

Philippines inventory (PICCS)

All components are listed or exempted.

16. Other information

Key to abbreviations

AMP = Acceptable Maximum Peak

ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.

ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail CAS Number = Chemical Abstracts Service Registry Number

HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk. ICAO = International Civil Aviation Organization.

IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water. IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO

NOHSC = National Occupational Health & Safety Commission, Australia

TWA = Time weighted average

Product name Anvol WG 46 Product code 453017-AU07 Page: 4/5

Version 3 Date of issue 8 February 2012 Format Australia Language ENGLISH (Australia) (ENGLISH) STEL = Short term exposure limit

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 08/02/2012.

Date of previous issue 16/01/2012.

Prepared by Product Stewardship

Notice to reader

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 BP Group.

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. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Product name Anvol WG 46 Product code 453017-AU07 Page: 5/5

Version 3 Date of issue 8 February 2012 Format Australia Language ENGLISH

(Australia) (ENGLISH)