MATERIAL SAFETY DATA SHEET according to 1907/2006/EG

Date of issue: 09.02.1999 Revised on: 27.01.2009

AUTOL Valve Profi Page 1 of 5

1. Identification of substance

Trade name: AUTOL Valve Profi

Application: Engine oil

Supplier:

Agip Schmiertechnik GmbH Paradiesstr. 14, 97080 Würzburg

Tel. (+ 49) 931/900 98-0 Fax (+ 49) 931/98442

Advising/Support:

Mr. Friese (Ulrich. Friese@agip.de), Safety Engineer/Technical Department

Tel. (+ 49) 931/900 98-145 (during working hours)

Tel. (+ 49) 931/900 98-0 (answering machine)

2. Hazards identification

The preparation is not classified as hazardous according to the Regulation on classification, packing and labelling of hazardous preparations.

3. Composition/information on ingredients

<u>Substances that are a health risk according to R.D. 36371995</u>, Rules and Regulations on Dangerous Substances:

Designation

Paraffinic mineral oil based solvent to severely refined, 2,5 - 9,99%

Index-no. 649-455-00-2, CAS-no. 64741-89-5, EC-no. 265-091-3

Lubricating oil, extracted with a solvent ant dewaxed, hydrogenated, 75 - 99,99%

Index-no. 649-530-00-X, CAS-no. 101316-72-7, EC-no. 309-877-7

Additives.

The complete text of the R-sets is given in section 16 of this Safety Data Sheet.

4. First aid measures

<u>Skin contact:</u> Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice.

Eye contact: Rinse eyes thoroughly for at least 10 minutes. Keep eyelids well apart. If irritation persists, seek medical attention.

<u>Ingestion:</u> Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to a hospital.

<u>Inhalation:</u> In case of disturbances owing to an exposure to a high concentration of vapours or mists, remove the victim from exposure; keep at rest; if necessary, seek medical attention.

<u>Aspiration of liquid into the lungs:</u> If there is the possibility that the product has been aspired into the lungs (i. e. in case of spontaneous vomiting), transport the victim to a hospital.

5. Fire fighting measures

<u>General information:</u> Shut off source of product, if possible. If possible, move containers and drums away from danger area.

Extinguishing media

Suitable: Small-size fires: Carbon dioxide, dry chemicals, foam, sand or earth.

Large fires: Foam or water fog (mist). These means should be used by trained personal only.

Not to be used: Do not use water jets. They could cause splattering and spread the fire.

MATERIAL SAFETY DATA SHEET according to 1907/2006/EG

Date of issue: 09.02.1999 Revised on: 27.01.2009

AUTOL Valve Profi Page 2 of 5

<u>Special protective equipment for fire fighters:</u> Personal protection equipment. Self-contained breathing apparatus.

<u>Useful precautions:</u> Avoid accidental sprays on hot surfaces or electrical contacts. In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limit for mists is about 45 g/m³ air.

Other information: Use water sprays to cool the surfaces exposed to the flames. Spilled product which is not burning should be covered with sand or foam. In case of fire, do not discharge runoff water, collect separately and use a proper treatment.

6. Accidental release measures

<u>General measures:</u> Shut off source of spill, if possible. Do not let the product flow into sewers, water courses or underground spaces. Notify local authorities according to relevant regulations.

Personal precautions

See section 8 of this sheet.

Methods for cleaning up:

<u>Soil:</u> Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid and waste materials in suitable waterproof and oil-resistant containers. Clean contaminated area. Dispose of according to local regulations.

<u>Water:</u> Confine the spillage. Remove from surface by skimming or suitable absorbents. Collect recovered product and other waste materials in suitable waterproof, oil-resistant containers. Recover or dispose of according to local regulations. Do not use solvents or dispersants.

7. Handling and storage

Storage

Keep away from sources of ignition.

Storage temperature: Ambient to 55 °C max.

Store in a well ventilated place.

Handling

Store the product in cool, well ventilated surroundings. Avoid proximity or contact with hot surfaces, flames or sparks. Avoid contact with skin. Do not breathe vapours or mists. Do not smoke. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned and declared safe.

Specific use(s): Lubricant for internal combustion engines.

8. Exposure limit and personal protection equipment

Exposure limit values

Work exposure limit for:

Paraffinic mineral oil based solvent to severely refined

TLV-TWA* 5 mg/m3 fog of oil

TLV-STEL* 10 mg/m³

Lubricating oil, extracted with a solvent ant dewaxed, hydrogenated

TLV-TWA* 5 mg/m3 fog of oil

TLV-STEL* 10 mg/m³

^{*}In case of need bear in mind other limits mentioned in the force laws or in the documents ACGIH.

MATERIAL SAFETY DATA SHEET according to 1907/2006/EG

Date of issue: 09.02.1999 Revised on: 27.01.2009

AUTOL Valve Profi Page 3 of 5

<u>Monitoring procedures:</u> Refer to relevant legislation and in any case to the good practice of industrial hygiene.

Control of exposure

<u>General information:</u> If the conditions of work require it and if plant characteristics, work procedures and other means are not able to reach the purpose, it is necessary to use suitable means of personal protection.

Respiratory protection:

Open or well ventilated areas: Not necessary.

Closed or confined areas (e. g. tank interiors): Self-contained breathing apparatus

Personal protection

Long-sleeved overalls. If necessary, refer to the EN 465-466-467 standards.

When there is a risk of contact with the eyes, use safety goggles or other means of protection. If necessary, refer to national standards or to the EN 166 standard.

When there is a risk of contact with the skin, use hydrocarbon resistant, felt-lined gloves. Experience shows that gloves made of Nitrile rubber or PVA (Polyvinyl alcohol) are adequate for this use. Gloves made of PVC can be used for limited periods. Gloves made of Neoprene or natural rubber (latex) have inadequate resistance. Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary refer to the EN 374 standard.

<u>Hygiene measures:</u> Avoid contact with skin and eyes. Do not breathe vapours or mists. Do not clean hands with dirty or oil-soaked rags. Do not keep dirty rags in the overall pockets. Do not drink, eat or smoke with dirty hands. Wash hands with water and soap, do not use solvents or other irritant products which have a defatting effect on the skin. Do not re-use clothes, if they are still contaminated.

9. Physical and chemical properties

Appearance: Clear and bright liquid (ASTM D 4176/1)

Odour: Characteristic

Colour:2,5(ASTM D 1500)Density at 15° C:0,883 kg/l(ASTM D 4052)Boiling point/range:> 200 $^{\circ}$ C at 10 mmHg(ASTM D 1160)Vapour pressure:1 x 10-3 hPa(ASTM D 1160)Viscosity at 40° C:110 cSt(ASTM D 445)

Solubility in water: Insoluble in water

pH: Not applicable

Pour point: -27° C (ASTM D 97) Flashpoint: 220° C (ASTM D 92) Auto-ignition temperature: $>300^{\circ}$ C (DIN 51794)

Explosion limits, lower/upper: Not determined Partition coefficient (P o/w): Not determined

DMSO extract of base stock: < 3% wt (IP 346/92)

10. Stability and reactivity

Thermal decomposition: COx, HC.

<u>Stability:</u> Stable product. <u>Hazardous reactions:</u> None.

Materials to avoid: Strong oxidants.

MATERIAL SAFETY DATA SHEET according to 1907/2006/EG

Date of issue: 09.02.1999 Revised on: 27.01.2009

AUTOL Valve Profi Page 4 of 5

11. Toxicological information

Oral toxicity (rat): LD 50 > 2000 mg/kg (estimated from the composition)

<u>Dermal toxicity (rabbit)</u>: LD50 > 2000 mg/kg (estimated from the composition) Inhalation toxicity (rat): LC50 > 5 mg/1/4 h (estimated from the composition)

Skin sensitization: The product is not classified as a sensitizer according to the criteria set by the EU.

Other information: Not irritating to eyes and skin. Minor irritation may occur after prolonged or repeated contact, especially if normal hygienic rules are not respected.

None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others.

12. Ecological information

<u>General information:</u> Handle according to general working hygiene practices to avoid pollution and release into the environment.

<u>Biodegradation:</u> The most significant constituents of the product should be considered as "inherently biodegradable", but no "easily biodegradable" and they may be moderately persistent, particularly in anaerobic conditions.

<u>Toxicity for aquatic organisms:</u> This product is not soluble in water. It floats on water and forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment).

No specific environmental data are available for this product. According to the components, and by comparison with other products of the same type and composition, it is expected that this product has a toxicity for aquatic organisms > 100 mg/l and must not be regarded as dangerous to the environment.

Other data: This product has no specific properties for inhibition of bacterial activity. In any case, wastewater containing this product should be treated in plants that are suited for the specific purpose. Water hazardous class (WGK): 2 (Germany)

13. Disposal considerations

Disposal of product

Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

European Waste Catalogue Code: 13 02 06 (Ref.: 2001/118/CE).

This code is only a general indication and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right code, considering the actual use of the product, alterations and contaminations

Disposal of packaging

Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned and declared safe.

Packaging that cannot be cleaned has to be disposed according to the legal regulations or in the context of the packaging disposal of the mineral oil industry.

14. Transport information

RID/ADR: Does not belong to any class of danger ICAO/IATA: Does not belong to any class of danger IMO-IMDG code: Does not belong to any class of danger

MATERIAL SAFETY DATA SHEET according to 1907/2006/EG

Date of issue: 09.02.1999 Revised on: 27.01.2009

AUTOL Valve Profi Page 5 of 5

15. Regulations

The preparation is not classified as hazardous according to the Regulation on classification, packing and labelling of hazardous preparations.

Contains: Calcium sulphonate. It may cause allergic reactions.

Safety data sheet available for professional user on request.

Applicable laws and regulations:

National laws on classification and labelling of dangerous substances/preparations (Adoption of Directive 67/548/CE and subsequent Adaptations to Technical Progress - ATP, and Directive 1999/45/CE).

Relevant national laws on health and safety on the workplace. National adoption of Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE)

National adoption of Directive 75/439/EC concerning disposal of used oils.

Relevant national laws on recycling and re-use of waste materials.

Relevant national laws on prevention of water pollution.

16. Other information

General indications:

Avoid excessive or improper use.

Other uses of the product:

Do not use the product for any purposes that have not been advised by the manufacturer. In that case, the user could be exposed to unforeseeable dangers.

This information relates only to the specific product and may not be valid if the product is used in combination with any other material or in any process.

The informations in this sheet are according to our best knowledge at the date of printing.

That stated above does not necessarily imply that the information is of a fully comprehensive nature in all cases. It is the responsibility of the user to determine the validity of this information for the application of the same in each case; nothing in this document will lessen this responsibility.