




SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION	
PRODUCT	
Product Name:	PAG 46, PAG 100 & PAG 150
Product Description:	Polyalkylene Glycol with fluorescent UV Dye
Intended Use:	Compressor Lubricant, Hydraulic Fluid, General Purpose Lubricant fluid.
COMPANY IDENTIFICATION	Manufactured For
Supplier	Harp International Limited Gellihirion Industrial Estate, Pontypridd, Rhondda Cynon Taff, CF37 5SX United Kingdom
Emergency telephone numbers	USA – Chemtrec: 800-424-9300 All Others – Chemtrec: +1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION
This material is dangerous according to regulatory guidelines (see (m)SDS Section 15)
CLASSIFICATION: May contain a small amount of additive that is toxic to fish in large amounts, avoid large spills to waterways.
BVA operates a world-wide system for hazard communication. Some hazards shown in Section 2 may apply to non-EU countries and may not result in classification and labeling in the EU. Please see Section 3 and 15 for country specific classification information, and Section 11 for additional details.
HEALTH HAZARDS
2.1 Hazard Classification: Not hazardous.
2.2 Label Elements Including Precautionary Statements
Symbol:

Signal Word: Warning.
Hazard Risk Statement: Harmful if Swallowed.
Precautionary Statement: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin and eyes.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse Mouth
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
2.3 Other Hazard: None known.
2.4 U.S.A. Hazardous Material Information System and National Fire Protection Association (U.S.A.)
Note : <i>This information is based on test data from similar products.</i> This product is not formulated to contain ingredients which have exposure limits established by regulatory agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.
Hazardous Material Information System and National Fire Protection Association (U.S.A.)



Degree of Hazard	NFPA	HMIS	HAZARD RATINGS	
Health	1	1	0	Insignificant
Fire	1	1	1	Slight
Reactivity	0	0	2	Moderate
Personal Protection		B	3	Serious
			4	Severe

This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3: COMPONENT INFORMATION

Chemical Name	CAS #	EINECs/ELINKs #	Percent (% wt)	Symbols /Risk Phrases
Polypropylene Glycol mixture	proprietary		>98 %	IK (None Required)
Other Proprietary Additives	proprietary		<2 %	IK (None Required)

Reportable Hazardous Substance(s) or Complex Substance(s)

None

Explanation of symbols:

IK = No Classification Required,

INGREDIENT COMMENTS

If no EU or no CAS numbers are given for classified components the raw material supplier has applied for / will apply for exemption, have not sent the complete information yet, or there could be no obligation to give the EU or CAS numbers.

SECTION 4 : FIRST AID MEASURES

Inhalation:	Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
Skin:	Wash with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops get medical attention.
Eye :	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion:	Seek immediate medical attention.

SECTION 5 : FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA	Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO ₂) to extinguish flames. Inappropriate Extinguishing Media: Straight streams of water
FIRE FIGHTING	Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel. Hazardous Combustion Products: Smoke, Fume, Carbon Monoxide, Aldehydes,
FLAMMABILITY PROPERTIES	Flash Point ASTM D92 (open cup typical) °C (°F) 268 (514) Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D Autoignition Temperature: N/D

SECTION 6 : SPILL OR LEAK HANDLING PROCEDURES

SPILL MANAGEMENT Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.



	<p>Water Spill: Stop leak if you can do so without risk. Material will sink. Remove material, as much as possible, using mechanical equipment.</p> <p>Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.</p>
ENVIRONMENTAL PRECAUTIONS	Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 : HANDLING AND STORAGE	
HANDLING	Prevent small spills and leakage to avoid slip hazard. Static Accumulator: This material is not a static accumulator.
STORAGE	Do not store in open or unlabeled containers.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION	
Exposure limits/standards for materials that can be formed when handling this product: When mists / aerosols can occur, the following are recommended: 5 mg/m ³ - ACGIH TLV, 10 mg/m ³ - ACGIH STEL.	
Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s)	
ENGINEERING CONTROLS	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: No special requirements under ordinary conditions of use and with adequate ventilation
PERSONAL PROTECTION	Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.
Respiratory Protection:	Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: No special requirements under ordinary conditions of use and with adequate ventilation. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.
Hand Protection:	Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: No protection is ordinarily required under normal conditions of use.
Eye Protection:	If contact is likely, safety glasses with side shields are recommended.
Skin and Body Protection:	Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
Specific Hygiene Measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.
	Components 2,6-Di-tert-butyl-p-cresol(BHT) BVA IHG TWA 10 mg/m ³ ACGIH TWA Inhalable fraction and vapor. 2 mg/m ³



ENVIRONMENTAL CONTROLS	See Sections 6, 7, 12, 13.
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SECTION 9 : PHYSICAL & CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.			
General Information		HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION	
Physical State	Liquid	Specific Gravity (Water=1)	0.99 20°C
Color	Fluorescent yellow	Flash Point typical °C (°F)	250 (500) Open Cup ASTM D92
Odor	Characteristic	Flammable Limits	LEL: N/D UEL: N/D
Odor Threshold	ND	Autoignition Temperature:	ND
		Boiling Point °C (°F)	>200 °C
OTHER INFORMATION		Vapor Density (Air=1)	10 calculated
Melting Point	Not Applicable to Liquids		
Pour Point °C (°F)	-40 (-40)	Vapor Pressure	< 0.013 kPa (0.1 mm Hg) at 20°C
Freezing Point	ND	Evaporation Rate (N-Butyl Acetate = 1):	ND
Viscosity	(typical)	pH	5.0 - 8.0 ASTM E70 (16.7% in isopropanol/water, 10:6)
cSt at 40°C	PAG 46 - 50 cSt	Log Pow (n-Octanol/Water Partition Coefficient):	ND
	PAG 100 - 98 cSt	Solubility in Water	< 100 % @ 20 °C Visual
	PAG 150 - 146 cSt	Oxidizing Properties	See Sections 3, 15, 16.

SECTION 10 : STABILITY & REACTIVITY

STABILITY:	Material is stable under normal conditions.
CONDITIONS TO AVOID:	Excessive heat. High energy sources of ignition.
MATERIALS TO AVOID:	Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS:	Material does not decompose at ambient temperatures.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
Route of Exposure	Conclusion / Remarks
INHALATION	
Toxicity: No end point data	Not determined
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.
INGESTION	
Toxicity: LD50(Rat) > 200 -5000 mg/kg	Minimally Toxic –moderately Toxic. Based on test data for structurally similar materials.
Skin	
Toxicity: LD50 (Rabbit) > 18000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.



CHRONIC/OTHER EFFECTS

For the product itself:

Repeated and/or prolonged exposure may cause irritation to the skin, eyes, or respiratory tract.

Contains:

Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitizing in test animals and humans.

Additional information is available by request.

SECTION 12 : ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Product-- Not expected to be harmful to aquatic organisms.

Ingredients

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Majority of components -- Expected to be inherently biodegradable

BIOACCUMULATION POTENTIAL

Majority of components -- Potential to bioaccumulate is low.

ECOLOGICAL DATA

SECTION 13 : DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

European Waste Code: 13 02 06

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.



SECTION 14 : TRANSPORT INFORMATION

LAND (ADR/RID) : Not Regulated for Land Transport

INLAND WATERWAYS (ADNR) : Not Regulated for Inland Waterways Transport

SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA) : Not Regulated for Air Transport

SECTION 15: Regulatory Information Product Component Ingredients

Chemical Name: Polyalkylene Glycol, Chemical Family: Polyglycol

**Material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives.
EU LABELING: Not regulated according to EC Directives**

United States

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances: None.
Section 304 CERCLA Hazardous Substances: None.

Canada

WHMIS (Canadian Workplace Hazardous Materials Information System)

This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act.

NATIONAL LEGISLATION / REGULATIONS

Ozone depleting chemicals: No ozone depleting chemicals are present or used in manufacture.

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Complies with the following national/regional chemical inventory requirements: AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA

Germany: Water Hazardous Class (WGK): 1

SECTION 16: OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):

IK - No Classification Required,

Xn - Harmful

R21/22 - Harmful in contact with skin and if swallowed.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS: 3 October 2011 Update to GHS

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Product Name: HARP PAG Series
Revision Date: 3 October 2011
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GHS and under Directive 2001/58/EC and other international



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