GLOBAL LUBRICANTS LIMITED SAFETY DATA SHEET DRY GRAF

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

* <u>PRODUCT NAME</u> : <u>Application</u> :	DRY GRAF A bonded dry graphite coating applied by spray, aerosol or brush Used for the assembly and lubrication of splines, gears, keyways, slide ways and start up coatings for
* <u>COMPANY:</u>	Forging tools and moulds also as non-stick coatings for gasket materials. Global Lubricants Limited
* ADDRESS: * EMERGENCY TELEPHONES: * FAX:	13 Sandwell Business Development Centre, Oldbury Road, Smethwick, West Mids B66 1NN + 44 (0) 121 544 3638 + 44 (0) 121 544 6505

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NO	CONTENTS	HEALTH (class)	RISK (R No)
ETHANOL	64-17-6	10-25	-	
DIMETHYL ETHER	115-10-6	50-70%	-	
* Composition	Blend of graphite, acrylic res	sin and other addit	ives in a non-chlorinate	ed solvent mixture. Aerosol
	Propelled by dim ethyl ether	gas.		

3. HAZARDS IDENTIFICATION.

EXTREMELY FLAMMABLE

4. FIRST AID MEASURES	
* <u>EYE CONTACT</u> :	Contact lenses should be removed. Irrigate copiously with clean fresh water for
	at least 10 minutes. Holding the eyelids apart and seek medical advise.
* <u>SKIN CONTACT</u> :	Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do
* INILIAL ATIONI	not use solvents/thinners. If in doubt seek medical advice.
:* <u>INHALATION</u> :	Remove to fresh air. If breathing is irregular or has stopped administer artificial respiration. Give nothing by mouth. if unconscious place in recovery position and
	seek medical advice.
* INGESTION:	If accidentally swallowed, obtain immediate medical attention. Keep at rest.
	Do not induce vomiting. Give Milk or water to drink
5. FIRE FIGHTING MEAS	
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* <u>EXTINGUISHING MEDIA</u> :	SURES
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6. ACCIDENTAL RELEASE MEASURES

<u>SPILL CLEAN UP METHODS</u>: Extinguish all ignition sources. Avoid sparks, flames heat and smoking. Ventilate. Wear suitable chemical protection, gloves and goggles etc. Absorb material from ruptured or leaking containers onto an inert material. Transfer to suitable container for subsequent disposal.

PRODUCT: DRY GRAF

7. HANDLING AND STORAGE

* USAGE PRECAUTIONS: Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. CAUTION Pressurised container. Do not expose to temperatures exceeding 50°C. Do not puncture or incinerate even when empty. Do not spray onto naked flame or any incandescent material. The use of a suitable barrier cream is recommended, but not as a, substitute for gloves.

* STORAGE PRECAUTIONS:

Store in a cool, dry place away from all sources of heat including direct sunlight. NO SMOKING. Observe the label precautions.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

INGREDIENT NAME	CAS No.	STD	LT EXP (8hrs)	ST EXP (10min)
ETHANOL	64-17-5	OES	1000 ppm	No std.
DIMETHYL ETHER	115-10-6	OES	1000 ppm	No std.

Ingredient comment:

OES: Occupational Exposure Standard LT EXP: Long Term Exposure Limit ST EXP: Short Term Exposure Limit

* <u>VENTILATION</u> :	No specific ventilation requirements noted, except this product must not be used
	in a confined space without good ventilation.
* <u>RESPIRATORS</u> :	No specific recommendation made, but respiratory protection must be used if the
	general level exceeds the Occupational Exposure Level (OEL)

* PROTECTIVE GLOVES:

* EYE PROTECTION:

evel exceeds the Occupational Exposure Level (OEL). Chemical resistant gloves required for prolonged or repeated contact. Safety goggles/glasses are advised if there is a risk of eye contact.

9. CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE;	Aerosol/Black Coating
ODOUR:	Solvent odour when wet, odourless when dry.
SPECIFIC GRAVITY @ 20°C:	N/A
pH:	N/A
SOLUBILITY:	Insoluble in water - Soluble in ketone and esters
FLASHPOINT (CLOSED CUP)°C:	<21 direct from aerosol spray, not flammable in dry form
FLAMMABILITY LIMIT (in air % by volume):	Lower 0.8 Upper 66.4 (when wet)
OES:	
OEL:	100ppm
VAPOUR PRESSURE @ 20°C:	N/A when dry
VAPOUR DENSITY (AIR =1):	N/A when dry
BOILING POINT (°c):	N/A when dry
POUR MELTING POINT (°C):	N/A when dry
KINEMATIC VISCOSITY 40°c(mm ² s-1):	N/A when dry

10. STABILITY AND REACTIVITY

* <u>MATERIAL TO AVOID</u> :	Strong oxidising agents.
* <u>CONDITIONS TO AVOID</u> :	Avoid naked flames, heat and other sources of ignition
* HAZARDOUS DECOMPOSITION PRODUCTS:	Fire creates carbon dioxide (CO2), carbon monoxide (CO) and other
	hydrocarbon combustion.

11 TOXICOLOGICAL INFORMATION

* <u>HEALTH WARNINGS</u> :	
* <u>Skin contact</u> :	Prolonged or repeated contact may cause irritation and/or dermatitis.
* Eye contact:	May cause moderate irritation, discomfort and possible damage.
* <u>Inhalation</u> :	High concentrations of vapour may cause dizziness, headaches, nausea, and in
	extreme cases, coma.
* <u>Ingestion</u> :	May Cause severe irritation to mouth, throat and intestinal system possibly
	leading to permanent damage.

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12. ECOLOGICAL INFORMATION

* DEGRADABILITY:

This product has good Bio-Degradability

* ACUTE FISH TOXICITY:

No Information available * WATER HAZARD CLASSIFICATION: This product should not be allowed to enter drains or water courses or be deposited, where it can affect ground or surface waters

13. DISPOSAL CONSIDERATIONS

* DISPOSAL METHODS:

Do not puncture or incinerate even when empty. Dispose of in accordance with local authority requirements

14. TRANSPORT INFORMATION

ROAD:	UN No:	1950	ADR CLASS:	2
	CEFIC TEC ® No:	20G26-2	ADR ITEM No:	5°F
AIR:	UN No:	1950	AIR TRANSPORT CLASS No:	2
	AIR PACK GR:			
SEA:	UN No:	1950	SEA TRANSPORT CLASS No:	2
	IMDG PAGE No:	2102	SEA PACK GR:	

15. REGULATORY INFORMATION

* <u>LABEL FOR SUPPLY</u> : * <u>RISK PHRASES</u> : * <u>SAFETY PHRASES</u> :	EXTREMELY FLAMMABLE R-12 Extremely flammable, harmful by inhalation S-16: Keep away from sources of ignition - No Smoking S-23: Do not breathe vapour spray S-24: Avoid contact with skin. S-36/37: Wear suitable protective clothing and gloves.	
* <u>UK REGULATORY REFERENCES</u> :	The Control of Substances Hazardous to Health Regulations 1988. Chemicals (Hazard Information & Packaging Regulations 1996 Aerosol Dispensers Regulations 1996/2421 (EC Directive 94/1).	

16. OTHER INFORMATION

This product is not considered harmful in its dry state. The information contained in this Data Sheet is provided with the requirements of the chemicals (Hazard information and Packaging) regulations. It does not constitute the user's own assessment of workplace risks as

required by other Health & Safety legislation. The provisions of the Health & Safety at Work etc. Act and the control of substances hazardous to health regulations apply to the use of this product at work.

The product should not be used for purposes other that those shown in section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of the product are outside the suppliers control. The user is responsible for ensuring that the requirements of the relevant legislation are complied with.

OES/MEL values are obtained from the current issue of EH40 unless indicated thus (sup) when a value has been obtained from the supplier. Further information and advise can be found in the following publications:

* INGREDIENTS TO BE DECLARED:

The following documentation is published by the UK Health and Safety Executive and is available from H.M. Stationary offices:

None

SI 1988:1657 The control of substances hazardous to health regulations 1988

SI 1992:2839 The environmental protection (Duty of care) regulations 1992

HS(G)71 Storage of packed dangerous substances

HS(G)51 Storage of flammable liquids in containers

EH 40 - Occupational exposure limits

EH 58 - The carcinogenicity of mineral oils

SHW 367 - Dermatitis cautionary notice

SHW 397 - Effects of mineral oil on the skin

THIS PRODUCT SHOULD BE STORED, HANDLED AND USED IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICES AND IN CONFORMITY WITH LEGAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON THE CURRENT STATE OF OUR KNOWLEDGE AND IS INTENDED TO DESCRIBE PRODUCTS FROM THE POINT OF VIEW OF SAFETY REQUIREMENTS AND THIS SHOULD NOT BE CONSTRUCTED AS GUARANTEEING SPECIFIC PROPERTIES.

ALL INFORMATION CONTAINED IN THIS DATA SHEET IS IN ACCORDANCE WITH CHEMICALS HAZARD INFORMATION AND PACKING REGULATIONS.

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