

## Xaerus XG 416 SERIES

Page: 1 of 5

### Material Safety Data Sheet

#### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name in English: XAERUS XG 416 Series  
 Synonyms: NONE  
 Product Codes: Same  
 Supplier: Global Refrigerants (S) Pte Ltd  
 Address: No.9 TUAS LINK 1, SINGAPORE 638587  
 Website: [www.globalrefrigerants.com.sg](http://www.globalrefrigerants.com.sg)  
 Email: [msds@globalrefrigerants.com.sg](mailto:msds@globalrefrigerants.com.sg)  
 Telephone: +6568633983  
 Telefax: +6568636330

CHEMICAL NAME: TRADE SECRET  
 CHEMICAL FAMILY: Synthetic Hydrocarbon  
 CHEMICAL FORMULA: NA  
 CAS NUMBER: 9003-13-8

PRPDUCT USE: INDUSTRIAL LUBRICANT  
 PREPARED BY: CHEMICALS BUSINESS GROUP

#### SECTION 2- COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENT NAME	Polypropylene glycol monobutyl ether		
Name:	CAS Number:	%WT	SARA 313 REPORTABLE
Polypropylene glycol Monobutyl ether	9003-13-8	0-99	NA
PROPRIETARY ADDITIVES		0-20	NA
	PPM		MG/M3
OSHA PEL-TWA:			5
OSHA PEL-STEL:	NA		
OSHA PEL-CEILING:	NA		
ACGIH TLV-TWA:			5
ACGIH TLV-STEL:			10
ACGIH TLV CEILING;	NA		

#### SECTION 3 – HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW:

Routes of Entry: Inhalation, Dermal, Eyes

EYES: Essentially nonirritating to eyes.  
 SKIN: Brief contact is essentially nonirritating to skin.  
 SKIN CONTACT: Prolonged skin contact is unlikely to result in absorption of harmful amounts.  
 INGESTION: Very low toxicity if swallowed. Harmful effects not Anticipated from swallowing small amounts.  
 INHALATION: At room temperature, exposure to vapour is minimal due to low volatility; single exposure is not likely to be hazardous.

## Material Safety Data Sheet

### SECTION 4 – FIRST AID MEASURES

<b>EYES:</b>	Flush eyes with water for at least 15 minutes. Remove contact lenses after 1-2 minutes of flushing. If Irritation develops seek medical attention
<b>SKIN:</b>	Wash affected area with soap and water
<b>INGESTION:</b>	NO EMERGENCY MEDICAL TREATMENT NECESSARY
<b>INHALATION:</b>	Move victim to fresh air. If symptoms persist, seek medical attention
<b>NOTES TO PHYSICIAN OR FIRST</b>	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition to the patient.

### SECTION 5- FIRE-FIGHTING MEASURES

<b>FLAMMABLE LIMITS IN AIR</b>	<b>UPPER:</b>	<b>NA</b>
<b>(% BY VOLUME)</b>	<b>LOWER</b>	<b>NA</b>
<b>FLASH POINT:</b>		
°F	446 – 464	
°C	230 – 240	
<b>METHOD USED:</b>	ASTM D-92	
<b>AUTOIGNITION TEMPERATURE:</b>		
°F	NA	
°C	NA	
<b>NFPA HAZARD CLASSIFICATION:</b>		
<b>HEALTH: 0</b>	<b>FLAMMABILITY: 1</b>	<b>REACTIVITY: 0</b>
<b>OTHER:</b>		
<b>HMIS HAZARD CLASSIFICATION:</b>		
<b>HEALTH: 0</b>	<b>FLAMMABILITY: 1</b>	<b>REACTIVITY: 0</b>
<b>PROTECTION:</b>		
<b>EXTINGUISHING METHOD:</b>	Dry chemical, CO2, Foam, water spray	
<b>SPECIAL FIREFIGHTING PROCEDURES:</b>	Self contained breathing apparatus and protective clothing	
<b>UNUSAL FIRE AND EXPLOSION HAARDS:</b>	This material may burn, but will not ignite readily. If container is not properly cooled. It can rupture in the heat of a fire.	
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Fumes, smoke, carbon monoxide , carbon dioxide	

**NOTES:** Low hazard liquid can burn upon heating to elevated Temperatures. Isolated immediate hazard area, keep authorized personnel out. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES:

**ACCIDENTAL RELEASE MEASURES:** Absorb the material with inert absorbent and dispose of in accordance with federal, state and local laws



## **Material Safety Data Sheet**

### **SECTION 7 – HANDLING AND STORAGE**

<b>HANDLING AND STORAGE:</b>	NO Special precautionary measures should be needed under anticipated conditions to use
<b>OTHER PRECAUTIONS:</b>	<u>NA</u>
<b>NOTES:</b>	Ground containers when transferring to avoid static discharge

---

### **SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION:**

---

#### **ENGINEERING CONTROLS:**

<b>VENTILATION:</b>	Good ventilation typically 10 air changes per minute should be used/
<b>RESPIRATORY PROTECTION:</b>	Under intended handling conditions, no respiratory protection should be Needed
<b>EYE PROTECTION:</b>	Approved safety glasses or goggles
<b>SKIN PROTECTION:</b>	Protective clothing to minimize contact, gloves
<b>HAND PROTECTION:</b>	Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include :butyl rubber. Ethyl vinyl alcohol laminated (EVAL). Examples of acceptable glove (PVC or VINYL). NITRY/BUTADIEND rubber (NITRILE or NBR). Notice: The selection of a specific glove for a particular Application and duration of use in a workplace should also take into account all relevant workplace factors such as but not limited to: other chemicals which may be handled , physical requirements (cut/puncture protection , dexterity, thermal protection). Potential body reactions to glove materials, as wellas the instructions/specifications provided by the glove supplier.
<b>OTHER PROTECTIVE CLOTHING OR EQUIPMENT:</b>	NA
<b>WORK HYGIENIC GUIDELINES:</b>	Follow standard safe industrial chemical handling practices.
<b>EXPOSURE GUIDELINES:</b>	NA
<b>NOTES:</b>	NONE

---

### **SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES:**

---

<b>APPEARANCE:</b>	Clear to slightly yellow liquid
<b>ODOR:</b>	Mild
<b>PHYSICAL STATE:</b>	LIQUID
<b>PH AS SUPPLIED:</b>	NA
<b>PH (OTHER):</b>	NA
<b>BOILING POINT:</b>	°F: > 392
<b>MELTING POINT:</b>	°F: NM
<b>VAPOR PRESSURE (MM HG:)</b>	mmHg @20° C <0.01
<b>VAPOR DENSITY (AIR=1)</b>	>1
<b>SPECIFIC GRAVITY (H2O=1)</b>	0.99 – 1.00

## Xaerus XG 416 SERIES

Page: 4 of 5

### Material Safety Data Sheet

EVAPORATION RATE: NM

BASIS (=1)

SOLUBLILITY IN WATER:				NEGLIBLE
PERCENT SOLIDS BY WEIGHT:				NA
PERCENT VOLATILE:				NIL
BY WEIGHT:	°F:	NM	°C:	
BY VOLUME:	°F:	NM	°C:	
VOLATILE ORGANIC COMPOUNDS:				
WITH WATER:		LBS/GAL		NM
WITHOUT WATER:		LBS/GAL		NM
MOLECULAR WEIGHT				NM
VISCOSITY @ 40°C:				68-220

---

#### SECTION 10– STABILITY AND REACTIVITY:

STABLE:	X	UNSTABLE
STABILITY:		
CONDITIONS TO AVOID (STABILITY)		Excessive heat, high energy sources of ignition
IMCOMPATIBILITY (MATERIALS TO AVOID)		Avoid contact with strong oxidizers, acids and bases
HAZARDOUS DECOMPOSITION OR BY PRODUCTS:		Combustion can yield carbon, nitrogen, sulphur, Phosphorus and zinc oxides
HAZARDOUS POLYMERIZATION:		Will not occur
CONDITIONS TO AVOID (POLYMERIZATION):		NA

---

#### SECTION 11– TOXICOLOGICAL INFORMATION:

TOXICOLOGICAL INFORMATION: **INGESTION:** LD20 Rat, female 34, 200 mg/kg  
**SKIN ABSORPTION:** LD50, Rabbit, male > 19,940 mg/kg  
LD50, Rabbit, female > 15950 mg/kg

NOTES: Carcinogenicity, developed toxicity and reproductive  
Toxicity: No relevant information found

---

#### SECTION 12– ECOLOGICAL INFORMATION:

ECOTOXICITY: **Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the mosensitive speciefies tested).**

NOTES: OECD Biodegradation Tests: Material is not considered readily biodegradable.

## Xaerus XG 416 SERIES

Page: 5 of 5

### Material Safety Data Sheet

#### SECTION 13 – DISPOSAL CONSIDERATIONS:

<b>WASTE DISPOSAL METHOD:</b>	Dispose of in accordance with all federal, state, and local laws. Product is suitable for burning in an enclosed controlled burner for fuel value. Do not dump into any sewers, on the ground, or into any body of Water.
<b>RCRA HAZARD CLASS:</b>	NA

---

#### SECTION 14 – TRANSPORT INFORMATION:

##### US DEPARTMENT OF TRANSPORTATION

<b>SHIPPING DESCRIPTION:</b>	Not regulated
<b>HAZARD CLASS:</b>	NA
<b>ID NUMBER:</b>	NA
<b>PACKING GROUP:</b>	NA
<b>LABEL STATEMENT:</b>	NA

##### WATER TRANSPORTATION:

<b>SHIPPING DESCRIPTION:</b>	Not regulated
<b>HAZARD CLASS:</b>	NA
<b>ID NUMBER:</b>	NA
<b>PACKING GROUP:</b>	NA
<b>LABEL STATEMENT:</b>	

##### AIR TRANSPORTATION:

<b>SHIPPING DESCRIPTION:</b>	Not regulated
<b>HAZARD CLASS:</b>	NA
<b>ID NUMBER:</b>	NA
<b>PACKING GROUP:</b>	NA
<b>LABEL STATEMENT:</b>	NA

---

#### SECTION 15– REGULATORY INFORMATION:

##### US FEDERAL REGULATIONS

<b>TSCA (TOXIC SUBSTANCE CONTROL ACT):</b>	All components listed on the TSCA inventory
<b>CERCLA (COMPREHENSIVE RESPONSE COMPENSATION AND LIABILITY ACT):</b>	NA
<b>SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORISATION ACT):</b>	
<b>311/312 HAZARD CATEGORIES:</b>	NA
<b>313 REPORTABLE INGREDIENTS:</b>	NA
<b>STATE REGULATIONS:</b>	NA
<b>INTERNATIONAL REGULATIONS:</b>	
<b>WHMIS HAZARD CLASS</b>	
<b>HAZARDOUS DECOMPOSITION OR BY</b>	Not regulated