

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **R216 OPEN GEAR LUBRICANT**

Article number: **R216**

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Tygris Industrial
Unit 31
Kyle Road Industrial Estate
Irvine
Ayshire
KA12 8LE
Tel +44 (0) 1294 311 066
Fax +44 (0) 1294 277 115
Email technical@tygrisindustrial.com

Further information obtainable from: Technical Department

1.4 Emergency telephone number: Tel +44 (0) 1294 311 066

2. Hazards identification

2.1 Classification (1999/45/EEC) F+;R12. R52/53.

2.2 Labelling



Extremely flammable

Risk Phrases R12 Extremely flammable.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases S16 Keep away from sources of ignition - No smoking.
S51 Use only in well-ventilated areas.
S60 This material and its container must be disposed of as hazardous waste.
S2 Keep out of the reach of children.
S23 Do not breathe vapour/spray

3. Composition/information on ingredients

BUTANE CAS-No.: 106-97-8 Classification (EC 1272/2008) Flam. Gas 1 - H220	5-10% EC No.: 203-448-7 Classification (67/548/EEC) F+;R12
ISOBUTANE CAS-No.: 75-28-5 Classification (EC 1272/2008) Flam. Gas 1 - H220	1-5% EC No.: 200-857-2 Classification (67/548/EEC) F+;R12
MINERAL OIL (REFINED) CAS-No.: 64742-52-5 Classification (EC 1272/2008) Not classified	10-30% EC No.: 265-155-0 Classification (67/548/EEC) Not classified
NAPHTHA (PETROLEUM) , HYDROTREATED LIGHT CAS-No.: 64742-49-0 Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	5-10% EC No.: 265-151-9 Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67
NAPHTHA (PETROLEUM) , HYDROTREATED HEAVY CAS-No.: 64742-48-9 Classification (EC 1272/2008) Not classified	1-5% EC No.: 265-150-3 Classification (67/548/EEC) Xn;R65. R10,R66
PROPANE CAS-No.: 74-98-6 Classification (EC 1272/2008) Flam. Gas 1 - H220	10-30% EC No.: 200-827-9 Classification (67/548/EEC) F+;R12
WHITE SPIRIT CAS-No.: 64742-82-1 Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	10-30% EC No.: 265-185-4 Classification (67/548/EEC) Xn;R65. N;R51/53. R10,R66

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16

4. First aid measures

4.1. Description of first aid measures

General information	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues
Inhalation	Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.
Skin contact	Wash the skin immediately with soap and water. Get medical attention if any discomfort continues
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. Firefighting measures

5.1 Extinguishing Media	Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.
5.2 Unusual Fire & Explosion Hazards:	Aerosol cans may explode in a fire
5.3 Special Fire Fighting Procedures:	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

6. Accidental release measures

6.1 Methods and material for containment and cleaning up	Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of explosion risk. If leakage cannot be stopped, evacuate area.
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7. Handling and storage

7.1 Precautions for safe handling	Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.
7.2 Conditions for safe storage, including any incompatibilities	Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C

8. Exposure controls/personal protection

Name	STD	TWA - 8 Hrs		STEL - 15 Min	
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3
ISOBUTANE	WEL	800 ppm		800 ppm	
MINERAL OIL (REFINED)			5 mg/m3		10 mg/m3
NAPHTHA (PETROLEUM), HYDROTREATED LIGHT			1200 mg/m3	60 ppm	216 mg/m3
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY			1000 mg/m3		
WHITE SPIRIT			600 mg/m3		
XYLENE	WEL	50 ppm(Sk)	220 mg/m3(Sk)	100 ppm(Sk)	441 mg/m3(Sk)

Ingredient Comments

WEL = Workplace Exposure Limits

8.1 Protective Equipment



Engineering measures:

Provide adequate general and local exhaust ventilation

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge

Hand protection

Use protective gloves

Eye protection

Use approved safety goggles or face shield

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact

8.2 Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke

9. Physical and chemical properties

Appearance	Aerosol
Colour:	Black
Odour:	Characteristic.
Solubility	Insoluble in water
Flammability Limit - Lower(%)	0.8
Flammability Limit - Upper(%)	9.0

10. Stability and reactivity

10.1 Chemical stability	Stable under normal temperature conditions
10.2 Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids.
10.3 Hazardous Decomposition Products:	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. Toxicological information

Inhalation	May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.
Skin contact	Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema
Eye contact	Irritating to eyes. May cause chemical eye burns
Route of entry	Inhalation. Skin and/or eye contact

12. Ecological information

Ecotoxicity	Dangerous for the environment if discharged into watercourses.
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13. Disposal considerations

Waste treatment methods	Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements
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14. Transport information

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
Proper Shipping Name	AEROSOLS
ADR/RID/ADN Class	2
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
ADR/RID/ADN Packing group	N/A
IMDG Packing group	N/A
ICAO Packing group	N/A
EMS	F-D, S-U
Tunnel Restriction Code	(D)

15. Regulatory information

UK Regulatory References	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. The Control of Substances Hazardous to Health Regulations 2002
Statutory Instruments	The Control of Substances Hazardous to Health Regulations 2002. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002
Approved Code Of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply
Guidance Notes	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16. Other information

Risk Phrases In Full

R12 Extremely flammable.
R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R11 Highly flammable
R38 Irritating to skin.
R66 Repeated exposure may cause skin dryness or cracking.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness

Hazard Statements In Full

EUH066 Repeated exposure may cause skin dryness or cracking.
H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.