1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name	Lubrication RFL 0
Uses	Roll Forming Lubricant
Product Code	LUBE-VIGGENRFL0 -L
Manufacturer/Supplier	Lubrication Limited
	Lubricant Distribution Centre
	Unit 3, Snibston Drive
	Coalville
	Leicestershire LE67 3NQ
	United Kingdom
Telephone	+44 (0) 1530 833899
Fax	+44 (0) 1530 813460
Emergency Telephone	+44 (0) 1530 833899
Email	technical@lubrication.net

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature	Petroleum-derived severely refined mineral-base
	product
	Content in PAH according to IP 346 method < 3%

Substances Presents a Health Hazard	EC No.	CAS No.	Content	Symbol(s)	R-Phrases
Hydrocarbons, C10-	923-037-2		50% –	Xn	R65, R10-53-66
C12, isoalkanes, <			100%		
2% aromatics					

3. HAZARDS INDENTIFICATION

EC No.	923-037-2
Label In Accordance With (EC) No.	1272/2008
Signal Word	Danger
Hazard Statements	H226 – Flammable liquid and vapour
	H304 – May be fatal if swallowed and enters
	airways
	H413 – May cause long lasting harmful effects to
	aquatic life.
Supplementary Precautionary Statements	P210 – Keep away from heat/sparks/open
	flames/hot surfaces. – No smoking
	P233 – Keep container tightly closed.
	P240 – Ground.bond container and receiving
	equipment
	P241 – Use explosion-proof electrical equipment
	P242 – Use only non-sparking tools.
	P243 – Take precautionary measures against static discharge.

	 P273 – Avoid release to the environment. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P301+310 – IF SWALLOWED: Immediately call a POISON CENTRE or DOCTOR/PHYSICIAN. P331 Do NOT induce vomiting. P370+378 In case of fire: Use foam, carbon dioxide, dry powder, or water fog for extinction. P403+235 – Store in a well-ventilated place. Keep cool. P405 – Store locked up. P501 – Dispose of contents/container to
Supplemental label information	EUH066 – Repeated exposure may cause skin dryness or cracking.
Health Effects	May cause long-term adverse effects in the aquatic environment. May be fatal if swallowed and enters airways.
Environmental Impact	May cause long lasting harmful effects to aquatic life.

4. FIRST AND MEASURES

4. FIRST AND WEASURES	T
Inhalation	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
	In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.
Skin Contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues. Prolonged skin contact may cause redness and irritation.
Eye Contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse. May cause severe irritation to eyes.
Ingestion	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately. Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Avoiding vomiting and normal rinse of stomach because of risk pf aspiration.
Advice to Physician	No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET

MEDICAL ATTENTION PROMPTLY!

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Suitable Extinguishing Media	Use dry chemical, CO_2 , alcohol-resistant foam or
	water spray (fog).
Unsuitable Extinguishing Media	Do not use water jet as an extinguisher, as this will
	spread the fire.
Protective Equipment for Firefighters	Fire-fighters should wear appropriate protective
	equipment and self-contained breathing apparatus
	(SCBA) with a full face-piece operated in positive
	pressure mode. Clothing for fire-fighters (including
	helmets, protective boots and gloves) conforming
	to European standard EN 469 will provide a basic
	level of protection for chemical incidents.
Hazards from the Substance or Mixture	In a fire or if heated, a pressure increase will occur
	and the container may burst
Hazardous Thermal Decomposition Products	Decomposition products may include the following
	materials:
	carbon dioxide
	carbon monoxide
	nitrogen oxides
	sulfur oxides

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

Observe the relevant local and international regulation	JIS.
Protective Measures – For Non-Emergency	No action shall be taken involving any personal risk
Personnel	or without suitable training. Evacuate surrounding
	areas. Keep unnecessary and unprotected
	personnel from entering. Do not touch or walk
	through spilled material. Put on appropriate
	personal protective equipment.
Protective Measures – For Emergency	If specialised clothing is required to deal with the
Responders	spillage, take note of any information in Section 8
	on suitable and unsuitable materials. See also
	Section 8 for additional information on hygiene
	measures.
Clean Up Method – Small Spill	Stop leak if without risk. Move containers from spill
	area. Dilute with water and mop up if water-
	soluble. Alternatively, or if water-insoluble, absorb
	with an inert dry material and place in an
	appropriate waste disposal container. Dispose of
	via a licensed waste disposal contractor.
Clean Up Method – Large Spill	Stop leak if without risk. Move containers from spill
	area. Prevent entry into sewers, water courses,
	basements or confined areas. Wash spillages into
	an effluent treatment plant or proceed as follows.
	Contain and collect spillage with non-combustible,
	absorbent material e.g. sand, earth, vermiculite or
	diatomaceous earth and place in container for
	disposal according to local regulations. Dispose of
	via a licensed waste disposal contractor.
Additional Advice	

7. HANDLING AND STORAGE

General Precautions Handling	Put on appropriate personal protective equipment (see Chapter 8).
Storage	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Chapter 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Product Transfer	
Recommended Materials	
Unsuitable Materials	
Additional Information	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Biological Exposure Index (BEI) – See reference for full details

No biological limit allocated.

Expective Controls	No special ventilation requirements. Good general
Exposure Controls	ventilation should be sufficient to control worker
	exposure to airborne contaminants. If this product
	contains ingredients with exposure limits, use
	process enclosures, local exhaust ventilation or
	other engineering controls to keep worker
	exposure below any recommended or statutory
	limits.
Hygiene Measures	Wash hands, forearms and face thoroughly after
	handling chemical products, before eating,
	smoking and using the lavatory and at the end of
	the working period.
	Appropriate techniques should be used to remove
	potentially contaminated clothing. Wash
	contaminated clothing before reusing. Ensure that
	eyewash stations and safety showers are close to
	the workstation location.
Respiratory Protection	Use a properly fitted, air-purifying or air-fed
	respirator complying with an approved standard if a
	risk assessment indicates this is necessary.
	Respirator selection must be based on known or
	anticipated exposure levels, the hazards of the
	product and the safe working limits of the selected
	respirator. Recommended: Boiling point > 65 °C:
	A1; Boiling point < 65 °C: AX1; Hot material: A1P2.
Hand Protection	Chemical-resistant, impervious gloves complying
	with an approved standard should be worn at all

	times when handling chemical products if a risk
	assessment indicates this is necessary. Wear
	suitable gloves tested to EN374. Recommended:
	Nitrile gloves.
Eye Protection	Safety eyewear complying with an approved
	standard should be used when a risk assessment
	indicates this is necessary to avoid exposure to
	liquid splashes, mists or dusts. If contact is
	possible, the following protection should be worn,
	unless the assessment indicates a higher degree
	of protection: safety glasses with sideshields.
Body Protection	Personal protective equipment for the body should
	be selected based on the task being performed
	and the risks involved and should be approved by
	a specialist before handling this product.
Environmental Exposure Controls	Emissions from ventilation or work process
	equipment should be checked to ensure they
	comply with the requirements of environmental
	protection legislation.
	In some cases, fume scrubbers, filters or
	engineering modifications to the process
	equipment will be necessary to reduce emissions
	• •
	to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

3: ITT SICAL AND CHEMICAET KOT EKTES	
Appearance	Clear colourless liquid
Odour	Slight
рН	Not available.
Initial Boiling Point and Boiling Range	140°C - 200°C
Pour Point	Not available.
Flash Point	41°C
Upper/Lower Flammability or Explosion Limits	Lower: 0.6%
	Upper: 7.0%
Auto-Ignition Temperature	>200°C
Vapour Pressure	0.2 kPa
Specific Gravity	0.701 – 0.781
Density	701 – 781 kg / m ³
Water Solubility	Water: Insoluble and Immiscible
	Organic Solvents: Soluble in many common
	solvents.
N-Octanol/Water Partition Coefficient (log Pow)	> 6
Kinematic Viscosity	$0.8 - 2.0 \text{ mm}^2 / \text{ s} (\text{cSt})$
Vapour Density (air = 1)	Not available.
Evaporation Rate (nBuAc = 1)	Not available.

10. STABILITY AND REACTIVITY

Stability	The product is stable.
Conditions to Avoid	Avoid heat, flames, and other source of ignition.
Materials to Avoid	Strong oxidizing materials.
	Will not polymerize.
Hazardous Decomposition Products	Under normal conditions of storage and use,
	hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

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Product/Ingredient Name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C12,	LD50 Dermal	Rabbit	>5000 mg / kg	-
isoalkanes, < 2% aromatics	LD50 Oral	Rat	>5000 mg / kg	-
	LD50 Inhalation	Rat	>5000 mg / kg	-

Potential Acute Health Effects

Eye Contact	May cause temporary eye irritation.
Inhalation	In high concentrations, vapours may irritate throat and respiratory system and cause coughing. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.
Skin Contact	Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact	No specific data.
Inhalation	No specific data.
Skin Contact	Adverse symptoms may include the following:
	irritation, dryness, cracking
Ingestion	No specific data.

Potential Chronic Health Effects

Conclusion/Summary	Not available.
General	Prolonged or repeated contact can defat the skin
	and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.
Fertility Effects	No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C12,	LC0	Rainbow Trout	1000 mg / I	96 hours
isoalkanes, < 2% aromatics	EC0	Daphnia Magna	1000 mg / I	48 hours
	EC0	Selenastrum Capricornutum	1000 mg / I	72 hours
	NOEC	Selenastrum Capricornutum	1000 mg / I	72 hours
	NOEC	Daphnia Magna	<1 mg / I	21 days

Degradability	Degradation (31.3%) 28 days
Bioaccumulative Potential	Not available.
Mobility in Soil	The product contains organic solvents which will evaporate easily from all surfaces. The product is
	insoluble in water.

13. DISPOSAL CONSIDERATIONS

Do not puncture or incinerate even when empty. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

licensed waste disposal site in accordance with the	
Material Disposal	The generation of waste should be avoided or
	minimized wherever possible. Waste product
	residues should not be disposed of via the sewer
	but processed in a suitable effluent treatment plant.
	Dispose of surplus and non-recyclable products via
	a licensed waste disposal contractor. Disposal of
	this product, solutions and any by-products should
	at all times comply with the requirements of
	environmental protection and waste disposal
	legislation and any regional local authority
	requirements. Waste packaging should be
	recycled. Incineration or landfill should only be
	considered when recycling is not feasible. This
	material and its container must be disposed of in a
	safe way. Empty containers or liners may retain
	some product residues. Avoid dispersal of spilled
	material and runoff and contact with soil,
	waterways, drains and sewers.
Container Disposal	The generation of waste should be avoided or
	minimized wherever possible. Waste packaging
	should be recycled. Incineration or landfill should
	only be considered when recycling is not feasible.
	This metanial and its contain an invest he dispected of
	This material and its container must be disposed of
	in a safe way. Empty containers or liners may
	retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil,
	waterways, drains and sewers.
Local Legislation	

14. TRANSPORT INFORMATION

UN Number Road	3295
UN No. (IMDG)	3295
UN No. (ICAO)	3295
Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (HYDROCARBONS, C10-C12, ISOALKANES, CYCLICS, <2% AROMATICS, LIQUID)
ADR/RID/AND Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3

Transport Labels	FLAMMABLE LIQUID
ADR/RID/ADN Packing group	
IMDG Packing group	111
ICAO Packing group	111
Environmentally Hazardous Substance/Marine Pollutant	
EMS	F-E, S-D
Emergency Action Code	3Y
Hazard No. (ADR)	30
Tunnel Restriction Code	(D/E)
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Cat Y

Transport within user's premises:

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Statutory Instruments	The Chemicals (Hazard Information and Packaging
	for Supply) Regulations 2009 (S.I 2009 No. 716).
The Chemicals (Hazard Information and	Classification and Labelling of Substances and
Packaging for Supply) Regulations 2009 (S.I	Preparations Dangerous for Supply. Safety Data
2009 No. 716).	Sheets for Substances and Preparations. DSEAR
Guidance Notes	CHIP for everyone HSG(108).
EU Legislation	Regulation (EC) No 1907/2006 of the European
	Parliament and of the Council of 18 December
	2006 concerning the Registration, Evaluation,
	Authorisation and Restriction of Chemicals
	(REACH), establishing a European Chemicals
	Agency, amending Directive 1999/45/EC and
	repealing Council Regulation (EEC) No 793/93 and
	Commission Regulation (EC) No 1488/94 as well
	as Council Directive 76/769/EEC and Commission
	Directives 91/155/EEC, 93/67/EEC, 93/105/EC and
	2000/21/EC, including amendments. Regulation

	Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
-	A chemical safety assessment has been carried out.

16. OTHER INFORMATION

SDS Version Number	1.0.1
SDS Effective Date	2014-03-01
SDS Revisions	1.0.2
SDS Distribution	Lubrication Limited
Disclaimer	To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that
	exist.