



SAFETY DATA SHEET

according to regulation (EU) No 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	BOT 850
Registration number	-
Synonyms	None.
SDS number	6738
Product code	200081
Issue date	06-October-2016
Version number	1.0
Revision date	06-October-2016
Product use	Public use

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

Identified uses	Lubricants
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company name	Jaguar Land Rover Limited
Address	Abbey Road, Whitley, Coventry CV3 4LF UK
Telephone	+44 (0)870 5000 500 (Mo-Thu 08:00-17:00 GMT/Fri 08:00-14:00 GMT)
E-mail	sds-info@msds.landrover.com
Contact person	HSE@rle.de

1.4. Emergency telephone number	+44 207 858 1228 (Worldwide English language number)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	None.

Precautionary statements

Prevention	None.
Response	None.
Storage	None.
Disposal	None.

Supplemental label information	EUH210 - Safety data sheet available on request.
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2.3. Other hazards	The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Distillates (petroleum), hydrotreated heavy paraffinic	75 - < 90	64742-54-7 265-157-1	01-2119484627-25-XXXX	649-467-00-8	UVCB, Note L
Classification:	Asp. Tox. 1;H304, Carc. 1B;H350				
Methacrylate Copolymer	3 - < 5	Proprietary	-	-	
Classification:	Eye Irrit. 2;H319				

Note: Regulation No. 1272/2008 - Annex VI

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Exposure may cause temporary irritation, redness, or discomfort.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed. Carbon dioxide (CO₂). Carbon monoxide.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Take off all contaminated clothing immediately.
7.2. Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat. Do not store in direct sunlight.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no effect levels (DNELs)	Not available.

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	Not applicable	Oral	9.33 mg/kg	food, predators

8.2. Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
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Individual protection measures, such as personal protective equipment

General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	If contact is likely, safety glasses with side shields are recommended. Safety glasses with side-shields conforming to EN166
Skin protection	
- Hand protection	For prolonged or repeated skin contact use suitable protective gloves. Protective gloves complying with EN 374. Nitrile. Glove thickness > 0.35 mm. Break through time 240 min or > 480 min
- Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

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.
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Environmental exposure controls	Environmental manager must be informed of all major releases.
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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

Physical state	Liquid.
Form	Liquid.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	232.0 °C (449.6 °F) Cleveland open cup

Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	insoluble
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Density	845.00 kg/m3 @ 15°C
Kinematic viscosity	7.1 mm²/s @ 100°C 35 mm²/s @ 40°C
Pour point	-42 °C (-43.6 °F)
VOC (EU)	Not applicable
VOC (CH)	< 3 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Defatting, drying and cracking of skin.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhoea.

Symptoms	Exposure may cause temporary irritation, redness, or discomfort.
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11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Distillates (petroleum), hydrotreated heavy paraffinic
(CAS 64742-54-7)

3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
12.2. Persistence and degradability	Expected to be biodegradable.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Spillages may penetrate the soil causing ground water contamination.
12.5. Results of PBT and vPvB assessment	The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.
12.6. Other adverse effects	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 13 02 05 15 01 10
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Not applicable.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 2015/830.

Other EU regulations

Directive 94/33/EC on the protection of young people at work, as amended

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

Methacrylate Copolymer (CAS Proprietary)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

VOC (EU):

Not applicable

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not applicable

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

AC: Article category.
acc., acc.to: according, according to.
ACGIH: American Conference of Governmental Industrial Hygienists.
AFNOR: French Institute for Standards (Association Française de Normalisation).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
AICS: Australian Inventory of Chemical Substances.
ANSI: American National Standards Institute.
AOEL: Acceptable Operator Exposure Level.
AOX: adsorbable organic halogen compounds.
approx.: approximately.
ASTM: ASTM International.
ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
BAM: Federal Institute for Materials Research and Testing, Germany (Bundesanstalt für Materialforschung und -prüfung).
Maximum permissible concentration of biological working substances (BAT: Biologische Arbeitsstofftoleranzwerte).
BAuA: Federal Institute for Occupational Health and Safety, Germany (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin).
BCF: Bio-concentration factor.
BET: Brunauer-Emmett-Teller.
BLV: Biological Limit Value.
BLV: Biological Limit Value (BGW: Biologischer Grenzwert, Austria).
BMGV: Biological Monitoring Guidance Value (EH40,UK).
BSI: British Standards Institution.
BS: British Standard.
BOD5: Biochemical oxygen demand within 5 days.
BOD: Biochemical oxygen demand.
bw: Body weight.
calcd.: calculated.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
CESIO: European Committee on Organic Surfactants and their Intermediates (Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques).
ChemRRV: Ordinance on the risk reduction related to chemical products (ChemRRV: Chemikalien-Risikoreduktions-verordnung, Switzerland).
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction.
CNS: Central Nervous System.
CNT: Carbon nanotubes.
COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.
 CSR: Chemical Safety Report.
 DETEC: Swiss Federal Department of the Environment, Transport, Energy and Communications.
 DIN: German Standards Institute / German industrial norm (Deutsches Institut für Normung / Deutsche Industrienorm).
 DMEL: Derived Minimum Effect Level.
 DNEL: Derived No Effect Level.
 DOC: Dissolved organic carbon.
 DPD: Directive 1999-45-EC / Dangerous Preparations Directive.
 DSD: Directive 67/548-EC / Dangerous Substances Directive.
 DSL: Canada, Domestic Substances List.
 DU: Downstream User.
 dw: dry weight.
 e.g.: For example, for instance.
 EBW: Exposure Based Waiving.
 EC: European Community.
 EC50: Effective Concentration 50%.
 ECHA: European Chemical Agency.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ELINCS: European List of Notified Chemical Substances.
 EN: European norm.
 ENCS: Japan, Inventory of Existing and New Chemical Substances.
 EPA: United States Environmental Protection Agency.
 ERC: Environmental release category.
 ES: Exposure scenario.
 EU: European Union
 EUSES: European Union System for the Evaluation of Substances.
 EWC/EWL: European Waste Catalogue.
 GCL: General concentration limit.
 gen.: general.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 GLP: Good Laboratory Practice.
 GW/VL: Occupational exposure limit value.
 GW-kw: Occupational exposure limit value - short term.
 GW-M/VL-M: Occupational exposure limit value – "Ceiling".
 GWP: Global Warming Potential.
 HPV: High Production Volume Chemicals.
 HEPA: High Efficiency Particulate Air.
 IARC: International Agency for Research on Cancer.
 IATA: International Air Transport Association.
 IBC: Intermediate Bulk Container.
 IBC Code: International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
 ICAO: International Civil Aviation Organization.
 IC50: Inhibition Concentration 50%.
 IECSC: Inventory of Existing Chemical Substances in China.
 IMDG Code: International Maritime Dangerous Goods Code.
 IMO: International Maritime Organization.
 incl.: including, inclusive.
 ISO: International Standards Organization.
 IUCLID: International Uniform Chemical Information Database.
 IUPAC: International Union for Pure Applied Chemistry.
 KECI: Korea Existing Chemicals Inventory.
 LCA: Life Cycle Assessment.
 LC: Lethal Concentration.
 LC50: Lethal Concentration 50%.
 LCLo: Lowest published lethal concentration.
 LD50: Lethal Dose 50%.
 LEV: Local exhaust ventilation.
 LOAEL: Lowest observed adverse effect level.
 LOEC: Lowest observable effect concentration.
 LOEL: Lowest observable effect level.
 LPV: Low Production Volume Chemicals.
 LQ: Limited Quantities.
 Air Quality Control Regulation (LRV: Luftreinhalteverordnung, Switzerland).
 TLV-STEL: Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value (TRK-Kzw = Technische Richtkonzentration - Kurzzeitwert).

Maximum allowable workplace concentration – instantaneous value (MAK-Mow: Maximale Arbeitsplatzkonzentration – Momentanwert, Austria)

Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value (MAK-Tmw, TRK-Tmw : Maximale Arbeitsplatzkonzentration - Tagesmittelwert / TRK-Tmw = Technische Richtkonzentration – Tagesmittelwert, Austria).

MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).

MARPOL: International Convention for the Prevention of Pollution From Ships.

MTD: Maximum tolerated dose.

MWCNT: Multi-walled carbon nanotubes.

n.a.: not applicable.

N/A: Not available.

n.d.: not determined.

NLP: No Longer Polymers.

NDSL: Canada, Non-Domestic Substances List.

NF: French Norm (See AFNOR).

NFPA: National Fire Protection Association.

NIOSH: National Institute for Occupational Safety & Health.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No observed adverse effect level.

NOEC: No observed effect concentration.

NOEL: No observed effect level.

NTP: National Toxicology Program.

NZIoC: New Zealand Inventory of Chemicals.

ODP: Ozone Depletion Potential.

OECD: Organization for Economic Cooperation and Development.

OEL: Occupational Exposure Limit.

org.: organic.

OSHA: Occupational Safety & Health Administration.

PAH: Polycyclic Aromatic Hydrocarbons.

PBT: Persistent, bioaccumulative, toxic.

PC: Product category.

PE: Polyethylene.

PEC: Predicted Environmental Concentration.

PEL: Permissible Exposure Limit.

PIC: Prior Informed Consent.

PICCS: Philippines Inventory of Commercial Chemical Substances.

PNEC: Predicted No Effect Concentration.

POCP: Photochemical ozone creation potential (Photochemisches Ozonbildungspotenzial).

POP: Persistent Organic Pollutant.

PPORD: Product and Process Oriented Research and Development.

PPE: Personal Protective Equipment.

PROC: Process category.

RA: Risk Assessment.

RAR: Risk Assessment Report.

RCRA: Resource Conservation Recovery Act.

REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).

RMM: Risk Management Measure.

RTECS: Registry of Toxic Effects of Chemical Substances.

QSAR: Quantitative Structure Activity Relation.

SARA: Superfund Amendments and Reauthorization Act.

SADT: Self-Accelerating Decomposition Temperature.

SCL: Specific concentration limit.

SEA: socio economic analysis.

STEL: Short-term Exposure Limit.

STP: Sewage treatment plant.

SU: Sector of use.

SVHC: Substance of Very High Concern.

SWCNT: single-walled carbon nanotubes.

ThOD: Theoretical oxygen demand.

TOC: Total Organic Carbon.

TLV: Threshold Limit Value.

TRA: Targeted Risk Assessment.

TRGS: Technical Rules for Hazardous Substances (German Standard)

TSCA: Toxic Substance Control Act.

TWA: Time Weighted Average.

UC: Use category.
 UDS: Use descriptor system.
 UEC: Use and exposure categories.
 UN: United Nations.
 UN RTDG: United Nations Recommendations on the Transport of Dangerous Goods.
 UVCB: Unknown or Variable Composition, Complex Reaction Products, and Biological Materials.
 Regulation on combustible liquids (VbF: Verordnung über brennbare Flüssigkeiten, Austria).
 Regulation of the Austria Minister for Labor and Social Affairs regarding health surveillance at the workplace (VGÜ = Verordnung des Bundesministers für Arbeit und Soziales über die Gesundheitsüberwachung am Arbeitsplatz).
 VOC: Volatile organic compounds.
 vPvB: very Persistent, very Bioaccumulative.
 WEL-TWA: Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).
 WEL-STEL: Workplace Exposure Limit-Short term exposure limit (15-minute reference period).
 WoE: Weight of evidence.
 WHMIS: Workplace Hazardous Materials Information System.
 WHO: World Health Organization.
 wwt: wet weight.

References

Information on evaluation method leading to the classification of mixture

Not available.

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H304 May be fatal if swallowed and enters airways.
 H319 Causes serious eye irritation.
 H350 May cause cancer by skin contact.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



Attachment to the Safety Data Sheet

Involved Products:

LR Part Number	Container size
1 LR048849	1 l