Liquic Power. FLOW IMPROVERS

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

of the mixture

LP™ 100 Flow Improver

Registration number

Registration number -

Synonyms None.

Issue date 19-April-2017

Version number 04

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

Identified uses Flow Improver.

Uses advised against

Other uses are not recommended unless an assessment is completed, prior to commencement of

that use, which demonstrates that the use will be controlled.

1.3. Details of the supplier of the safety data sheet

Only Representative of a

non-Community Manufacturer

Penman Consulting Limited

Address Aspect House,

Wayland Avenue Grove Business Park Wantage, Oxon OX12 9FF United Kingdom

Telephone +44(0) 1367 718 474

E-mail pcltd02@penmanconsulting.com

Manufacturer LiquidPower Specialty Products Inc.

Address 2103 CityWest Blvd.

Suite 1400

Houston, TX 77042

Telephone 1.713.339.8703 or 1.800.897.2774

E-mail SDS@LiquidPower.com
Website www.LiquidPower.com
1.4. Emergency telephone +1 703.527.3887 (USA)

number

+1 800.424.9300 (USA)

CHEMTREC UK +44 870 820 0418

+44 203 807 3798

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 The mixture does not meet the criteria for classification.

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Precautionary statements

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling

Store away from incompatible materials. Storage

Disposal Dispose of waste and residues in accordance with local authority requirements.

Supplemental information on

the label

None.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation

(EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

The components are not hazardous or are below required disclosure limits.

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.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Eve contact Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

4.2. Most important symptoms and effects, both acute and

delayed

Direct contact with eyes may cause temporary irritation.

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.

5.3. Advice for firefighters

Special protective equipment for firefighters

Special fire fighting

Move containers from fire area if you can do so without risk.

procedures Specific methods

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

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Wear appropriate personal protective equipment.

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the For emergency responders

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.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

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SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Avoid prolonged exposure. Ensure adequate ventilation. Observe good industrial hygiene

practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in a closed container. Store away from incompatible materials (see Section 10 of the SDS).

Flow Improver. 7.3. Specific end use(s)

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) Not available.

Exposure guidelines

Follow standard monitoring procedures.

8.2. Exposure controls

Appropriate engineering

controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

Use personal protective equipment as required. Personal protective equipment should be chosen **General information**

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection Risk of contact: Wear approved safety goggles. Eye protection should meet standard EN 166.

Skin protection

- Hand protection Use suitable protective gloves if risk of skin contact. Neoprene, butyl rubber, nitrile or Viton gloves

are recommended.

- Other If prolonged or repeated contact is likely, chemical resistant clothing is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In case of inadequate ventilation or when

the product is heated, use suitable respiratory equipment with gas filter (type A2).

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

Always observe good personal hygiene measures, such as washing after handling the material Hygiene measures

> and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be

cleaned

Environmental exposure

controls

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid. Physical state Liquid. Form Colour White. Odour Mild.

Not available. **Odour threshold** 10 - 12.4 Melting point/freezing point 0 °C (32 °F) Initial boiling point and boiling 100 °C (212 °F)

range

Not applicable. Flash point **Evaporation rate** Same as water Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits Explosive limit - lower (%) Not applicable.

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Explosive limit – upper Not applicable.

(%)

Vapour pressure 23.8 mmHg (25°C)

Vapour density < 1 (Air = 1)

Relative density 0.84 - 0.97 (25°C / 77°F)

Solubility(ies)

Solubility (water) Disperses completely.

Partition coefficient (n-octanol/water)

Property has not been measured.

Auto-ignition temperature Property has not been measured.

Decomposition temperature Property has not been measured.

Viscosity 50 - 200 cP 511s-1 (Non-Newtonian) (25°C)

Explosive propertiesNot explosive. **Oxidising properties**Not oxidising.

9.2. Other information

Kinematic viscosity Property has not been measured.

Particle size Not applicable.

SECTION 10: Stability and reactivity

10.1. ReactivityThe 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 avoidContact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous

No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

General information No adverse effects are expected.

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactProlonged skin contact may cause temporary irritation.Eye contactDirect contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Skin corrosion/irritationNo information available on the mixture. However, none of the components are classified in

respect of this hazard (or are present at a level below the concentration threshold for

classification).

Serious eye damage/eye

irritation

No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for

espect of this nazard (of are present at a level below the concentration threshold it

classification).

Respiratory sensitisation No information available on the mixture. However, none of the components are classified in

respect of this hazard (or are present at a level below the concentration threshold for

classification).

Skin sensitisationNo information available on the mixture. However, none of the components are classified in

respect of this hazard (or are present at a level below the concentration threshold for

classification).

Germ cell mutagenicityNo information available on the mixture. However, none of the components are classified in

respect of this hazard (or are present at a level below the concentration threshold for

classification).

Carcinogenicity No information available on the mixture. However, none of the components are classified in

respect of this hazard (or are present at a level below the concentration threshold for

classification).

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Reproductive toxicity

No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for

classification).

Specific target organ toxicity -

single exposure

No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

Specific target organ toxicity - repeated exposure

No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

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Aspiration hazard
Mixture versus substance
information

Not an aspiration hazard.

The product is a mixture.

Other information

None known.

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

No data available.

degradability

12.3. Bioaccumulative potential No data available. **Partition coefficient** Not available.

n-octanol/water (log Kow)

Not available.

12.4. Mobility in soil

This product is dispersible in water. Expected to be mobile in soil.

12.5. Results of PBT and vPvB

Bioconcentration factor (BCF)

assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation

(EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste

Dispose 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

16 03 06

This material, if discarded as produced, would not be considered as hazardous waste pursuant to Directive 2008/98/EC on hazardous waste, and directive 75/442/EEC on waste.

This code has been assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste generators/producers are responsible for assessing the actual process used when generating the waste and it's contaminants in order to assign the proper waste disposal code.

Disposal methods/information

Waste material from this product should not be exposed to waste streams or sumps containing any concentration of hydrocarbon. This will cause formation of gelled substances that may plug pipes. 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

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

Retained direct EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Other EU regulations

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

Not listed.

Other regulations

This product is classified and labelled in accordance with the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain. This Safety Data Sheet is compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758.

15.2. Chemical safety

A Chemical Safety Assessment is not required for this substance.

assessment

References

SECTION 16: Other information

List of abbreviations

PBT: Persistent, bioaccumulative, toxic. vPvB: very Persistent, very Bioaccumulative. HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity

EPA: AQUIRE database

Information on evaluation method leading to the classification of mixture

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

None.

Training information

Follow training instructions when handling this material.

Issued byLiquidPower Specialty Products Inc. 2103 CityWest Blvd.

Suite 1400

Houston, TX 77042 United States 1.713.339.8703 SDS@LiquidPower.com

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