

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 1 of 15

LIQUID BUFFING SOLUTION

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

1.1 Product identifier

Product Name: LIQUID BUFFING SOLUTION

Product code: 61427-67, 61432-67

Additional information: Rev. 11

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

Relevant identified uses: To clean a tyre or tube injury before a cold or hot cure repair

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Supplier:

European Union

SCHRADER S.A.S

BP 29 - 48 rue de Salins

25301 Pontarlier Cedex, France

+33 (0)3 81 38 56 56

resale.info@schrader-pacific.fr

www.schrader-pacific.fr

1.4 Emergency telephone number:

European Union

CHEMTREC

France +(33)-975181407

Germany 0800-181-7059 & (Frankfurt) +(49)- 69643508409

Italy 800-789-767 & (Milan) +(39)-0245557031

Spain 900-868538; (Barcelona) + (34) 931768545

Portugal +(351)-308801773

Netherlands +(31)-858880596

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

Flammable liquids, category 2

Aspiration hazard, category 1

Skin irritation, category 2

Specific target organ toxicity - single exposure, category 3, central nervous system

Chronic aquatic hazard, category 2

Hazard-determining components of labeling:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Heptane

2.2 Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 2 of 15

LIQUID BUFFING SOLUTION

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.

P321 Specific treatment (see supplemental first aid instructions on this label).

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P362+P364 Take off contaminated clothing and wash it before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

P331 Do NOT induce vomiting.

P391 Collect spillage

P403+P235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

P403+P233 Store in a well ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 64742-49-0 EC number: 265-151-9 REACH number: 01-2119475515-33-0015	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Stot SE 3; H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411 Skin Irrit. 2 ; H315 Flam. Liq. 2; H225	>80
CAS number: 142-82-5 EC number: 205-563-8	Heptane	Asp. Tox. 1; H304 Skin Irrit. 2 ; H315 Stot SE 3; H336 Flam. Liq. 2; H225 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<5

Additional information: None

Full Text of H and EUH statements: See section 16

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 3 of 15

LIQUID BUFFING SOLUTION

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Not determined or not available.

Following inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention

Following skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

Following eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

Following ingestion:

This product presents an aspiration hazard. If aspiration is suspected, seek emergency medical treatment. If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Skin contact may result in redness, pain, burning and inflammation

Inhalation may have adverse effects on the central nervous system. Symptoms may include drowsiness, dizziness, headache, nausea and lowering of consciousness. Acute overexposure via inhalation may result in respiratory distress, confusion and unconsciousness

May be fatal if swallowed and enters airways. Aspiration may cause pulmonary oedema and pneumonitis. Symptoms may include shortness of breath, dry cough and irritation of the nose, eyes, lips, mouth and throat

Delayed symptoms and effects:

Symptoms of pulmonary oedema may be delayed.

Effects are dependent on exposure (dose, concentration, contact time).

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment:

Overexposure via inhalation requires urgent medical treatment.

Aspiration of this product following ingestion requires emergency medical treatment.

Skin/eye burns require immediate treatment.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media:

Do not use a water stream as an extinguisher.

5.2 Special hazards arising from the substance or mixture:

Highly flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 4 of 15

LIQUID BUFFING SOLUTION

mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

5.3 Advice for firefighters

Personal protection equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

6.4 Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 5 of 15

LIQUID BUFFING SOLUTION

Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

7.3 Specific end use(s):

Refer to Section 1 (Recommended Use).

SECTION 8: Exposure controls/personal protection



8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Poland	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0	STEL: 1500 mg/m ³
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0	TWA: 500 mg/m ³
	Heptane	142-82-5	8-hour TWA (NDS): 1200 mg/m ³
	Heptane	142-82-5	15-minute STEL (NDSCh): 2000 mg/m ³
Bulgaria	Heptane	142-82-5	TWA: 1600 mg/m ³
Croatia	Heptane	142-82-5	Maximum (8 hr) allowable concentration: 500 ppm (2085 mg/m ³)
Czech Republic	Heptane	142-82-5	8-hour TWA: 1000 mg/m ³
	Heptane	142-82-5	Ceiling limit (NPK-P): 2000 mg/m ³
Estonia	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m ³)
Hungary	Heptane	142-82-5	8-hour TWA (ÁK Value): 2000 mg/m ³
	Heptane	142-82-5	60-minute STEL (CK value): 8000 mg/m ³
Latvia	Heptane	142-82-5	8-hour TWA: 350 mg/m ³ (85 ppm)
	Heptane	142-82-5	15-minute STEL: 2085 mg/m ³ (500 ppm)
Lithuania	Heptane	142-82-5	8-hour TWA: 2085 mg/m ³ (500 ppm)
	Heptane	142-82-5	15-minute STEL: 3128 mg/m ³ (750 ppm)
Malta	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m ³)
Romania	Heptane	142-82-5	8-hour TWA: 2085 mg/m ³ (500 ppm)
Slovakia	Heptane	142-82-5	8-hour TWA (NPEL): 500 ppm (2085 mg/m ³)

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 6 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Slovenia	Heptane	142-82-5	8-hour TWA: 2085 mg/m ³ (500 ppm)
European Union	Heptane	142-82-5	IOEL threshold limit: 2085 mg/m ³ (500 ppm)
	Heptane	142-82-5	SCOEL 8-hour TWA: 500 ppm (2085 mg/m ³)
Belgium	Heptane	142-82-5	8-hour TWA: 400 ppm (1664 mg/m ³)
	Heptane	142-82-5	15-minute STEL: 500 ppm (2085 mg/m ³)
Denmark	Heptane	142-82-5	TWA: 200 ppm (820 mg/m ³)
Finland	Heptane	142-82-5	8-hour limit: 300 ppm (1200 mg/m ³)
	Heptane	142-82-5	15-minute limit: 500 ppm (2100 mg/m ³)
France	Heptane	142-82-5	Time weighted average (VME): 400 ppm (1668 mg/m ³)
	Heptane	142-82-5	Short term exposure limit: 500 ppm (2085 mg/m ³)
Germany	Heptane	142-82-5	AGW limit value: 500 ppm (2100 mg/m ³)
	Heptane	142-82-5	AGW Short term (15 min) exposure limit: 500 ppm (2100 mg/m ³)
Greece	Heptane	142-82-5	8-hour TWA: 500 ppm (2000 mg/m ³)
	Heptane	142-82-5	15-minute STEL: 500 ppm (2000 mg/m ³)
Ireland	Heptane	142-82-5	8-hour OEL (TWA): 500 ppm (2085 mg/m ³)
Italy	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m ³)
Netherlands	Heptane	142-82-5	Binding 8-hour TWA: 1200 mg/m ³
	Heptane	142-82-5	Binding STEL (15 min): 1600 mg/m ³
Portugal	Heptane	142-82-5	Decree-Law No. 24/2012 8-hour TWA: 500 ppm (2085 mg/m ³)
	Heptane	142-82-5	NP 1796-2007 8-hour exposure limit: 400 ppm
	Heptane	142-82-5	NP 1796-2007 Short-term exposure limit: 500 ppm
Spain	Heptane	142-82-5	8-hour daily exposure limit (VLA-ED): 500 ppm (2085 mg/m ³)
Sweden	Heptane	142-82-5	Level Limit Value (NGV): 200 ppm (800 mg/m ³)
	Heptane	142-82-5	Short Term Limit (KTV): 300 ppm (1200 mg/m ³)

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 7 of 15

LIQUID BUFFING SOLUTION

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Heptane	142-82-5	Short Term Limit (KTV): 300 ppm (1200 mg/m ³) - Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1)
	Heptane	142-82-5	Level Limit Value (NGV): 200 ppm (800 mg/m ³) - Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1)
United Kingdom	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m ³)
Luxembourg	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m ³)
Austria	Heptane	142-82-5	TWA: 2000 mg/m ³ (500 ppm)
	Heptane	142-82-5	STEL: 8000 mg/m ³ (2000 ppm)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL):

Not determined or not applicable.

Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls
Biological monitoring may also be appropriate for some substances

8.2 Exposure controls

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance in compliance with European Standard EN 374 and/or EN 420. For continuous contact, we recommend nitrile gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Always seek advice from glove suppliers.

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.

Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Use a European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Comply with the European Standard EN149.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 8 of 15

LIQUID BUFFING SOLUTION

General hygienic measures:

- Avoid contact with skin, eyes and clothing.
- Wash hands before breaks and at the end of work.
- Wash contaminated clothing before reuse.

Environmental exposure controls:

- Select controls based on a risk assessment of local conditions.
- See section 6 for information on accidental release measures.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Clear liquid
Odor	Strong solvent
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	190 °F (88 °C)
Flash point (closed cup)	15 °F (-9 °C)
Evaporation rate	> 1 (Butyl Acetate = 1)
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	6.7% (V)
Lower flammability/explosive limit	1.2% (V)
Vapor pressure	119 mmHg at 20 °C (68 °F)
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	0.69 g/cm ³ (6.22 lbs./gal) @ 20 °C
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

9.2 Other information

VOC	691 g/L
-----	---------

SECTION 10: Stability and reactivity

10.1 Reactivity:

Does not react under normal conditions of use and storage.

10.2 Chemical stability:

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions:

None under normal conditions of use and storage.

10.4 Conditions to avoid:

Excess heat, ignition source or flames.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

Page 9 of 15

LIQUID BUFFING SOLUTION

10.5 Incompatible materials:

None known.

10.6 Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
	inhalation	LC50 Rat: > 4.42 mg/L (4 hr, vapor)
Heptane	inhalation	LC50 Rat: > 29.29 mg/L (4 hr)
	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg

Skin corrosion/irritation

Assessment:

Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Causes skin irritation.
Heptane	Causes skin irritation.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 10 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

Substance data:

Name	Species	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not applicable	The carcinogenic classification applies to naphtha streams containing >0.1% Benzene.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	The mutagenic classification applies to naphtha streams containing >0.1% Benzene.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	The classification as a reproductivetoxicant onlyapplieswhenthe naphtha stream contains >3% toluene and/or n-hexane.

Specific target organ toxicity (single exposure)

Assessment:

May cause drowsiness or dizziness

Product data:

No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	May cause drowsiness or dizziness.
Heptane	May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment:

May be fatal if swallowed and enters airways

Product data:

No data available.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 11 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	May be fatal if swallowed and enters airways.
Heptane	May be fatal if swallowed and enters airways.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

Assessment:

Toxic to aquatic life

Product data: No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	ErC50 Selenastrum capricornutum: 3.1 mg/L (72 hr)
	EC50 Daphnia magna: 4.5 mg/L (48 hr)
Heptane	LC50 - Carassius auratus (goldfish) - 4 mg/l - 24.0 h
	EC50 - Daphnia magna - 82.5 mg/L - 96 h
	EC50 Daphnia magna: 1.5 mg/L (48 hr)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EC50 Daphnia magna: 10 mg/L (10 days)
Heptane	NOEC Oncorhynchus mykiss: 1.28 mg/L (28 days)

12.2 Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance (UVCB).
Heptane	Readily biodegradable in water.

12.3 Bioaccumulative potential

Product data: No data available.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 12 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance (UVCB).
Heptane	Calculated BCF: 552 (Not expected to bioaccumulate).

12.4 Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Heptane	Moderately Mobile (log Koc: 2.38)

12.5 Results of PBT and vPvB assessment

PBT assessment:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	This substance is not PBT.
Heptane	This substance is not PBT.

vPvB assessment:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	This substance is not vPvB.
Heptane	This substance is not vPvB.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations



13.1 Waste treatment methods

Relevant information:

Consult with EU Directive 2008/98/EC for the classifications of hazardous waste prior to disposal. Furthermore, consult with your regional, national or European waste requirements or guidelines, if applicable, to ensure compliance. Final decisions on the appropriate waste management method, in line with regional, national and European legislation, remains the responsibility of the waste treatment operator

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)



Initial preparation date: 11.04.2016

Page 13 of 15



Revision date: 08.26.2020

LIQUID BUFFING SOLUTION



International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS):

64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Listed
142-82-5	Heptane	Listed

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 14 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

REACH SVHC candidate list: None of the ingredients are listed.

REACH SVHC Authorizations: None of the ingredients are listed.

REACH Restriction: None of the ingredients are listed.

Water hazard class (WGK) (Product): Class 2

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0	2
Heptane	142-82-5	2

Other regulations

Germany TA Luft: Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics: Class I; Mass flow: 0.1 kg/hr; Maximum Concentration Allowed if Emissions Exceed Base Rate: 20 mg/m³

Germany MAK: Heptane: 8-hour TWA: 500 ppm (2100 mg/m³)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Indication of changes:

August 26, 2020: Reviewed/updated to comply with the 12th and 14th Adaptations to Technical Progress (ATP) of the CLP Regulation. Composition change, resulting in updated occupational exposure limits

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Flammable liquids, category 2	Calculation method
Aspiration hazard, category 1	Calculation method
Skin irritation, category 2	Calculation method
Specific target organ toxicity - single exposure, category 3, central nervous system	Calculation method
Chronic aquatic hazard, category 2	Calculation method

Summary of classification(s) in section 3:

Stot SE 3; H336	Specific target organ toxicity - single exposure, category 3, central nervous system
Asp. Tox. 1; H304	Aspiration hazard, category 1
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Skin Irrit. 2 ; H315	Skin irritation, category 2
Flam. Liq. 2; H225	Flammable liquids, category 2
Aquatic Acute 1; H400	Acute aquatic hazard, category 1
Aquatic Chronic 1; H410	Chronic aquatic hazard, category 1

Summary of hazard statements in section 3:

H336	May cause drowsiness or dizziness
H304	May be fatal if swallowed and enters airways
H411	Toxic to aquatic life with long lasting effects
H315	Causes skin irritation
H225	Highly flammable liquid and vapour
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Page 15 of 15

Revision date: 08.26.2020

LIQUID BUFFING SOLUTION

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH). The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

Initial preparation date: 11.04.2016

Revision date: 08.26.2020

End of Safety Data Sheet