This information is provided for purchasers of the SENSE mRNA-Seq Library Prep Kit for Ion Torrent, represented by the following catalogue numbers: 006.03, 006.08, 006.24, 007.08A/B, 007.24A/B

<table>
<thead>
<tr>
<th>Tube</th>
<th>Reagent</th>
<th>MSDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB</td>
<td>Magnosphere MS150 / oligodT Beads</td>
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<tr>
<td>HYB</td>
<td>RNA Hybridization Buffer</td>
<td>No 1)</td>
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<td>H2O</td>
<td>Molecular Biology Grade Water</td>
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<tr>
<td>RTS</td>
<td>Reverse Transcription and Ligation Mix short</td>
<td>No 1)</td>
</tr>
<tr>
<td>RTL</td>
<td>Reverse Transcription and Ligation Mix Long</td>
<td>No 1)</td>
</tr>
<tr>
<td>ST</td>
<td>Starter/Stopper Mix (No In-line Barcode)</td>
<td>No 1)</td>
</tr>
<tr>
<td>E1</td>
<td>Enzyme Mix 1</td>
<td>No 1)</td>
</tr>
<tr>
<td>SSM</td>
<td>Second Strand Synthesis Mix</td>
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<tr>
<td>E2</td>
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<tr>
<td>PCR</td>
<td>PCR Mix</td>
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<tr>
<td>EB</td>
<td>Elution Buffer</td>
<td>No 1)</td>
</tr>
<tr>
<td>BW</td>
<td>Bead Wash Buffer</td>
<td>No 1)</td>
</tr>
<tr>
<td>CBS</td>
<td>Column Binding Buffer Short</td>
<td>Yes</td>
</tr>
<tr>
<td>CBL</td>
<td>Column Binding Buffer Long</td>
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</tr>
<tr>
<td>CW</td>
<td>Column Wash Buffer</td>
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</tr>
<tr>
<td>ST01-ST24</td>
<td>Starter/Stopper Mix</td>
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</table>

1) Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or preparation according to EC directives 67/548/EEC or 1999/45/EC.
SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifiers
Product Name
Column Binding Buffer Short (CBS)
Column Binding Buffer Long (CBL)
Product Number
N/A
Kit name
SENSE mRNA-Seq Library Prep Kit for Ion Torrent
Kit numbers
006.03, 006.08, 006.24, 007.08A/B, 007.24A/B
Brand
Lexogen

1.2 Relevant identified uses of the substance/mixture and uses advised against
Identified uses
Laboratory chemicals, FOR RESEARCH USE ONLY

1.3 Details of the supplier of the Material Safety Data Sheet
Company
Lexogen GmbH
Campus Vienna Biocenter 5
1030 Vienna
Austria
Telephone
+43 1 345 1212
Fax
+43 1 345 1212-99
Email Address
support@lexogen.com

1.4 Emergency telephone number
Emergency Telephone
+43 1 406 43 43

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4)
Skin corrosion (Category 1C)
Chronic aquatic toxicity (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Harmful by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Causes burns.

2.2 Label elements
Pictogram:

Signal word
Danger

Hazard statement(s)
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H412 Toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P273   Avoid release to the environment.
P280   Wear protective gloves/eye protection/face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310   Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard information (EU)
EUH032   Contact with acids liberates very toxic gas.

2.3 Other hazards   none

SECTION 3. Composition/information on ingredients

3.2 Mixtures
Hazardous ingredients according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guanidine thiocyanate</td>
<td>Acute Tox. Oral 4; Acute Tox. Inh. 4; Acute Tox. Derm. 4; Skin corr. 1C; Chron. Aquat. Tox. 3; H302 + H312 + H332, H314, H412, EUH032</td>
<td>20-80 %</td>
</tr>
</tbody>
</table>

Hazardous ingredients according to Directive 1999/45/EC

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guanidine thiocyanate</td>
<td>R20/21/22, R32, R34, R52/53</td>
<td>20-80 %</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4. First aid measures

4.1 Description of first aid measures
General Advice
After exposure, consult physician. Show the physician this material safety data sheet.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
4.3 Indication of immediate medical attention and special treatment needed
No data available.

SECTION 5.    Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media
Dry powder.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, nitrogen oxides, sulphur oxides.

5.3 Precautions for fire-fighters
Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information
No data available.

SECTION 6.    Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas.
Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7.    Handling and storage
7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Do not store near acids.

7.3 Specific end uses
No further relevant information available.

SECTION 8.    Exposure controls/personal protection
8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace

8.2 Exposure controls
Personal protective equipment
Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

General protective and hygienic measures
The usual precautionary measures are to be adhered to when handling chemicals.

SECTION 9. Physical and chemical properties
9.1 Information on basic physical and chemical properties
Appearance Form: liquid, clear
Colour:
Odour Characteristic
Odour threshold No data available
pH No data available
Melting/freezing point No data available
Initial boiling point and boiling range No data available
Flash point No data available
Evaporation rate No data available
Flammability (solid, gas) No data available
Upper/lower flammability or explosive limits No data available
Vapour pressure No data available
Vapour density No data available
Relative density No data available
Water solubility No data available
Partition coefficient: noctanol/water No data available
Autoignition temperature No data available
Decomposition temperature No data available
Viscosity No data available
Explosive properties No data available
Oxidizing properties No data available

9.2 Other safety information
No data available.

SECTION 10. Stability and reactivity
10.1 Reactivity
No data available.

10.2 Chemical stability
No data available.

10.3 Possibility of hazardous reactions
No dangerous reactions known.
10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
Strong acids, strong oxidizing agents, cyanides.

10.6 Hazardous decomposition products
No data available.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 – oral – rat 593 mg/kg
LD50 – intraperitoneal – mouse 300 mg/kg

Primary irritant effect on the skin
No data available.

Primary irritant effect on the eye
No data available.

Sensitization
No sensitizing effects known.

Signs and symptoms of exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional toxicological information
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The product is not subject to classification according to the latest version of the EU lists.

Potential health effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion May be harmful if swallowed. Causes burns.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

SECTION 12. Ecological information

12.1 Toxicity
No data available.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.
12.6 Other adverse effects
No data available.

SECTION 13. Disposal considerations
13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused products.

SECTION 14. Transport information
14.1 UN-Number
ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard classes
ADR/RID: - IMDG: - IATA: -

14.4 Packaging group
ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards
ADR/RID: no IMDG: Marine pollutant: no IATA: no

14.6 Special precautions for users
No data available.

SECTION 15. Regulatory information
This material safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available.

15.2 Chemical safety assessment
No data available.

SECTION 16. Other information
Full text of H-Statements referred to undern sections 2 and 3
Acute Tox. Oral Acute toxicity, Oral
Acute Tox. Inh. Acute toxicity, Inhalation
Acute Tox. Derm. Acute toxicity, Dermal
Skin Corr. Skin corrosion
Chron. Aquat. Tox. Chronic aquatic toxicity
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
EUH032 Contact with acids liberates very toxic gas.
Full text of R-phrases referred to under sections 2 and 3.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R32 Contact with acids liberates very toxic gas.
R34 Causes burns.
R41 Risk of serious damage to the eyes.
R52/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regards to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lexogen shall not be held liable for any damage resulting from handling or from contact with the above product. Please see also our terms and conditions on our website www.lexogen.com

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