**SAFETY DATA SHEET**

Methylated Spirit

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

**1.1. Product identifier**

<table>
<thead>
<tr>
<th>Classification of substance or mixture and uses advised against</th>
</tr>
</thead>
</table>

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

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer**

<table>
<thead>
<tr>
<th>Company name</th>
<th>Center Pac Sweden AB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office address</td>
<td>Vintervägen 6</td>
</tr>
<tr>
<td>Postal address</td>
<td>Vintervägen 6</td>
</tr>
<tr>
<td>Postcode</td>
<td>S-28344</td>
</tr>
<tr>
<td>City</td>
<td>Osby</td>
</tr>
<tr>
<td>Country</td>
<td>Sweden</td>
</tr>
<tr>
<td>Tel</td>
<td>+46 (0)47912640</td>
</tr>
<tr>
<td>Fax</td>
<td>+46 (0)47910098</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:info@centerpac.se">info@centerpac.se</a></td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.centerpac.se">www.centerpac.se</a></td>
</tr>
</tbody>
</table>

**1.4. Emergency telephone number**

| Emergency telephone | 112 (Europe) |

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**SECTION 2: Hazards identification**

**2.1. Classification of substance or mixture**

<table>
<thead>
<tr>
<th>Classification according to 67/548/EEC or 1999/45/EC</th>
<th>R11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]</td>
<td>Xi: R36; R67</td>
</tr>
</tbody>
</table>

**2.2. Label elements**

**Hazard Pictograms (CLP)**

**Signal word**

| Danger |

**Hazard statements**

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
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/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to destruction, in accordance with local regulations.

2.3. Other hazards

Other hazards
Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Classification</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>CAS no.: 64-17-5</td>
<td>F; R11 Flam. Liq. 2; H225</td>
<td>60 - 79 %</td>
</tr>
<tr>
<td></td>
<td>EC no.: 200-578-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 603-002-00-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synonyms: Ethanol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>CAS no.: 67-63-0</td>
<td>F; R11 Xi; R36 R67 Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
<td>21 - 40 %</td>
</tr>
<tr>
<td></td>
<td>EC no.: 200-661-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 603-117-00-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synonyms: Propan-2-ol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butanone</td>
<td>CAS no.: 78-93-3</td>
<td>F; R11 Xi; R36 R66 Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
<td>1 %</td>
</tr>
<tr>
<td></td>
<td>EC no.: 201-159-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 606-002-00-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synonyms: Butan-2-one</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Skin contact
Remove contaminated clothes and rinse skin thoroughly with water.

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 if any
Ingestion
NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. Rinse mouth with water. Drink plenty of water. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed
Information for health personnel
Treat Symptomatically. Do not give victim anything to drink if he is unconscious.

General symptoms and effects Irriterande effekter (irritant effects).
Acute symptoms and effects Irriterande effekter (irritant effects).
Delayed symptoms and effects Irriterande effekter (irritant effects).

4.3. Indication of any immediate medical attention and special treatment needed
Medical treatment For specialist advice physicians should contact the Poisons Information Service.
Specific details on antidotes No recommendation given.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Improper 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
Fire and explosion hazards HIGHLY FLAMMABLE! Solvent vapours may form explosive mixtures with air.
Hazardous combustion products Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

5.3. Advice for firefighters
Fire fighting procedures No specific fire fighting procedure given.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
Personal protection measures Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate well. Stop leak if possible without risk. Avoid contact with skin and eyes. Do not breathe vapour. Regarding personal protection, see Section 8.

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

6.3. Methods and material for containment and cleaning up
Cleaning method Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections
Other instructions Information regarding exposure / personal protection and disposal, see section 8 and 13.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Handling Keep away from heat, sparks and open flame. Take precautionary measures against static discharges. Mechanical ventilation may be required.

Protective Safety Measures
Advice on general occupational hygiene Provide easy access to water supply and eye wash facilities.

7.2. Conditions for safe storage, including any incompatibilities
Storage
Keep away from heat, sparks and open flame. Ground container and transfer equipment to eliminate static electric sparks. Store in a cool and well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)
Specific use(s) Not entered.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Value</th>
<th>TWA Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>CAS no.: 64-17-5</td>
<td>8-hour TWA: 1000 ppm</td>
<td>2011</td>
</tr>
<tr>
<td></td>
<td>EC no.: 200-578-6</td>
<td>8-hour TWA: 1920 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 603-002-00-5</td>
<td>Synonyms: Ethanol</td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>CAS no.: 67-63-0</td>
<td>8-hour TWA: 400 ppm</td>
<td>2011</td>
</tr>
<tr>
<td></td>
<td>EC no.: 200-661-7</td>
<td>8-hour TWA: 999 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 603-117-00-0</td>
<td>Synonyms: Propan-2-ol</td>
<td></td>
</tr>
<tr>
<td>Butanone</td>
<td>CAS no.: 78-93-3</td>
<td>8-hour TWA: 200 ppm</td>
<td>2011</td>
</tr>
<tr>
<td></td>
<td>EC no.: 201-159-0</td>
<td>8-hour TWA: 600 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 606-002-00-3</td>
<td>Synonyms: Butan-2-one</td>
<td></td>
</tr>
</tbody>
</table>

Other Information about threshold limit values
Norske grenseverdier; FOR-2011-12-06-1358 vedlegg 1
2-propanol: 8 t.: 100ppm, 245 mg/m3 (2003)
Etanol: 8 t.: 500ppm, 950 mg/m3 (2003)
EtOH: TWA; 1,000 ppm, 1,920 mg/m3 (12 2011, EH40 WEL)
Isopropanol: TWA; 400 ppm, 999 mg/m3 (12 2011, EH40 WEL)
STEL; 500 ppm, 1,250 mg/m3 (12 2011, EH40 WEL)

DNEL / PNEC

Method of testing

| DNEL          | Group: Consumer
|---------------| Exposure route: Dermal
|               | Exposure frequency: Long term (repeated)
|               | Type of effect: Systemic effect
|               | Value: 206 mg/kg bw/day

| DNEL          | Group: Worker
|---------------| Exposure route: Dermal
|               | Exposure frequency: Long term (repeated)
|               | Type of effect: Systemic effect
|               | Value: 343 mg/kg bw/day

| DNEL          | Group: Consumer
|---------------| Exposure route: Oral
|               | Exposure frequency: Long term (repeated)
|               | Type of effect: Systemic effect
|               | Value: 26 mg/kg bw/day

| DNEL          | Group: Consumer
|---------------| Exposure route: Inhalation
|               | Exposure frequency: Long term (repeated)
|               | Type of effect: Systemic effect
|               | Value: 89 mg/m³

| DNEL          | Group: Worker
|---------------| Exposure route: Inhalation
|               | Exposure frequency: Long term (repeated)
Type of effect: Systemic effect  
Value: 500 mg/m³  

DNEL  
Group: Consumer  
Exposure route: Inhalation  
Exposure frequency: Short term (acute)  
Type of effect: Local effect  
Value: 950 mg/m³  

DNEL  
Group: Worker  
Exposure route: Inhalation  
Exposure frequency: Short term (acute)  
Type of effect: Local effect  
Value: 1900 mg/m³  

PNEC  
Exposure route: Water  
Value: 0.96 mg/l  
Remarks: PNEC values represent Ethanol, the major Component of this mixture.  
Comment : Fresh water.  

PNEC  
Exposure route: Water  
Value: 0.79 mg/l  
Remarks: PNEC values represent Ethanol, the major Component of this mixture.  
Comment : Marine water.  

PNEC  
Exposure route: Sediment  
Value: 3.6 mg/kg  
Remarks: PNEC values represent Ethanol, the major Component of this mixture.  
Comment : Fresh water.  

PNEC  
Exposure route: Soil  
Value: 0.63 mg/kg  
Remarks: PNEC values represent Ethanol, the major Component of this mixture.  

8.2. Exposure controls  
Limitation of exposure on workplace  
Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. Protective gloves and goggles are recommended. Provide eyewash, quick drench.  

Safety signs  

Respiratory protection  
Respiratory protection must be used if air contamination exceeds acceptable level. Use respiratory equipment with gas filter, type A2.  

Hand protection  
Use protective gloves. Chemical resistant gloves required for prolonged or repeated contact. Handskar av PVA eller Viton rekommenderas. Butyl rubber or polyvinyl acetate.  

Eye / face protection  
Use safety goggles or face shield in case of splash risk.  

Skin protection  
Wear appropriate clothing to prevent any possibility of skin contact.  

Hygiene / Environmental  
Wash hands after contact.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>reddish</td>
</tr>
<tr>
<td>Odour</td>
<td>Odour of alcohol</td>
</tr>
<tr>
<td>Comments, pH (as supplied)</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>Value: 73-83 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Value: 12 °C</td>
</tr>
<tr>
<td>Explosion limit</td>
<td>Value: 2-19 %</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>Value: 789-800 kg/m3</td>
</tr>
<tr>
<td>Test temperature: 20 °C</td>
<td></td>
</tr>
<tr>
<td>Solubility description</td>
<td>Completely soluble in water. Soluble in: Organic solvents.</td>
</tr>
<tr>
<td>Spontaneous combustibility</td>
<td>Value: ~ 365 °C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Value: 1.82 cSt</td>
</tr>
<tr>
<td>Method of testing: ASTM D445</td>
<td></td>
</tr>
<tr>
<td>Test temperature: 25 °C</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: Heating may cause a fire.

10.2. Chemical stability

Stability: Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid: Avoid contact with oxidising agents (e.g. nitric acid, peroxides and chromates). Strong acids. Alkali metals. Acid anhydrides.

10.6. Hazardous decomposition products


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

Other toxicological data:
- Acute Toxicity (Oral LD50): mg/kg (oral rat) >2000
- Acute Toxicity (Inhalation LC50): Rat (4h) >25000 mg/m3
- Acute Toxicity (Dermal LD50): Rabbit 13900 mg/kg

Potential acute effects:

Inhalation: In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Ikke klassificerad som aspirationstoxisk (Not classified as asp. tox.)

Skin contact: Prolonged or frequent contact may cause redness, itching, eczema and skin cracking. Defats the skin.

Eye contact: Causes serious eye irritation.

Ingestion: Ingestion of large amounts may cause unconsciousness. However, ingestion may cause nausea, headache, dizziness and intoxication. Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea. May cause irritation to the mouth and throat.

Delayed effects / repeated exposure

...
Sensitisation
Not known.

Chronic effects
None known.

**Carcinogenic, Mutagenic or Reprotoxic**

Carcinogenicity
None.

Mutagenicity
Not known.

Teratogenic properties
Not known.

Reproductive toxicity
Not known.

SECTION 12: Ecological information

12.1. Toxicity

- **Acute aquatic, fish**
  Value: 9640 mg/l
  Method of testing: LC50
  Duration: 96h

- **Acute aquatic, algae**
  Value: 675 mg/l
  Method of testing: EC50
  Duration: 4d

- **Acute aquatic, Daphnia**
  Value: 5012 mg/l
  Method of testing: LC50
  Duration: 48h

**Other ecotoxicological information, crustaceans**
Chronic NOEC >10 mg/l, Daphnia, 21 days

12.2. Persistence and degradability

Degradation half life
Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential
Will not bio-accumulate.

Comments to bioaccumulation
LogPow: 0.05

12.4. Mobility in soil

Mobility
The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results
This substance is not classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects / Remarks
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal

- Product classified as hazardous waste
  Yes

- Packaging classified as hazardous waste
  Yes

**Confirm disposal procedures with environmental engineer and local regulations. Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point. Liquid components can be disposed of by incineration.**

13.2. Waste treatment methods

Product classified as hazardous waste
Yes

Packaging classified as hazardous waste
Yes

SECTION 14: Transport information

14.1. UN number

<table>
<thead>
<tr>
<th>ADR</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>RID</td>
<td>1987</td>
</tr>
<tr>
<td>IMDG</td>
<td>1987</td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>1987</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

ADR
ALCOHOLS, N.O.S.
14.3. Transport hazard class(es)

ADR 3
Hazard no. 33
RID 3
ADN 33
IMDG 3
ICAO/IATA 3

14.4. Packing group

ADR II
RID II
IMDG II
ICAO/IATA II

14.5. Environmental hazards

Comments Not relevant.

14.6. Special precautions for user

EmS F-E, S-D

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

Pollution category Z

SECTION 15: Regulatory information

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


Legislation and regulations Dangerous Substance Directive 67/548/EEC.

15.2. Chemical safety assessment

SECTION 16: Other information

Hazard symbol

R-phrases

R11 Highly flammable.
R36 Irritating to eyes.
R67 Vapours may cause drowsiness and dizziness.

S-phrases

S2 Keep out of the reach of children.
S7 Keep container tightly closed.
S16 Keep away from sources of ignition - No smoking.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

List of relevant R-phrases (under headings 2 and 3).

List of relevant H-phrases (Section 2 and 3).

Version 1

Responsible for safety data sheet Center Pac Sweden AB