1 Identification of substance:

- **Product details:**
- **Trade name:** V4
- **Manufacturer/Supplier:**
  SEITZ GmbH
  Chemische Fabrik
  Gutenbergstr. 3
  D-65830 Kriftel
- **Information department:**
  CHEM-TEL Inc.
  10770 North 46th Street STE. B100
  Temple Terrace
  Tampa Florida 33617
- **Emergency information:** 1-800-255-3924

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous ingredients.
- **CAS-No.**  
<table>
<thead>
<tr>
<th>Substance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-56-4  acetic acid n-butylester</td>
<td>20 - 50%</td>
</tr>
<tr>
<td>34590-94-8 dipropylene glycol monomethylether</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>68411-30-3 linear alkylbenzenesulfonic acid salt</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>108-10-1  4-methylpentan-2-one</td>
<td>&lt; 20%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Hazard description:**
  Irritant liquid
  Flammable liquid
- **Information pertaining to particular dangers for man and environment**
  The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  Flammable.
  Risk of serious damage to eyes.
- **Classification system**
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4)**
  - **Health:** 2
  - **Fire:** 3
  - **Reactivity:** 0

4 First aid measures

- **General information**
  Immediately remove any clothing soiled by the product.
  Remove casualties from exposure.
  Keep unprotected persons away.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Trade name: V1

(Contd. of page 1)

- After inhalation
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact
  Immediately rinse with water.
  If skin irritation continues, consult a doctor.
- After eye contact
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; immediately call for medical help.
- Information for doctor
  The following symptoms may occur:
  Headache
  Dizziness
  Dizziness
  Nausea
  Unconsciousness

5 Fire fighting measures

- Suitable extinguishing agents
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents
  Water with full jet.
- Special hazards caused by the material, its products of combustion or resulting gases:
  In case of fire, the following can be released:
  Carbon monoxide and carbon dioxide (CO, CO2)
  Nitrogen oxides (NOx)
  Sulphur oxides (SOX)
  In certain fire conditions, traces of other toxic gases cannot be excluded.
- Protective equipment:
  Wear self-contained respiratory protective device.
  Do not inhale explosion gases or combustion gases.
- Additional information
  Cool endangered receptacles with water spray.
  Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons away.
  Keep away from ignition sources
  Ensure adequate ventilation
  Avoid contact with eyes and skin
  Avoid inhalation of gases / fumes.
- Measures for environmental protection:
  Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collection:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose of the collected material according to regulations.
7 Handling and storage

- Handling
  - Information for safe handling:
    Keep away from heat and direct sunlight.
    Ensure good ventilation/exhaustion at the workplace.
    Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
    Avoid contact with eyes and skin.
  - Information about protection against explosions and fires:
    Keep ignition sources away. Do not smoke.
    Protect against electrostatic charges.
    Protect from direct sun exposure and temperatures over 40°C.
    Formation of explosive vapour-air mixture possible.
    Flammable gas-air mixtures may be formed in empty receptacles.

- Storage
  - Requirements to be met by storerooms and receptacles:
    Store only in the original receptacle.
    Prevent any seepage into the ground.
    Information about storage in one common storage facility.
    Store away from foodstuffs.
    Store away from oxidizing agents.
    Do not store together with alkalis (caustic solutions).
    Do not store together with acids.

  - Further information about storage conditions:
    Store in cool, dry conditions in well sealed receptacles.
    Store receptacle in a well ventilated area.
    Protect from frost.

  - Class according to regulation on flammable liquids: A 11

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Compound</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-86-4 acetic acid n-butylester</td>
<td>110 mg/m³, 150 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REL Short-term value: 950 mg/m³, 200 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term value: 710 mg/m³, 150 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV Short-term value: 950 mg/m³, 200 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term value: 713 mg/m³, 150 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compound</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>34590-94-8 diprolyne glycol monomethylether</td>
<td>600 mg/m³, 100 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin REL Short-term value: 900 mg/m³, 150 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term value: 600 mg/m³, 100 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV Short-term value: 909 mg/m³, 150 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term value: 606 mg/m³, 100 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Material Safety Data Sheet
acc. to ISO/DIS 11014

Trade name: V1

108-10-1 4-methylpentan-2-one

PEL: 410 mg/m³, 100 ppm
REL: Short-term value: 300 mg/m³, 75 ppm
Long-term value: 205 mg/m³, 50 ppm
TLV: Short-term value: 307 mg/m³, 75 ppm
Long-term value: 205 mg/m³, 50 ppm
BEI

- Additional information: The lists that were valid during the creation were used as basis.

- Personal protective equipment
  General protective and hygienic measures
  The usual precautionary measures for handling chemicals should be followed.
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing.
  Do not eat, drink, smoke or sniff while working.
  Wash hands before breaks and at the end of work.
  Do not inhale gases / fumes / aerosols.
  Avoid contact with the eyes and skin.

- Breathing equipment:
  Not necessary if room is well-ventilated
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Protection of hands:
  Solvent resistant gloves
  The glove material has to be impermeable and resistant to the product / the substance / the preparation.

- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Tightly sealed goggles.
- Body protection: Solvent resistant protective clothing

9 Physical and chemical properties:

- General Information
  Form: Fluid
  Color: Yellowish
  Odor: Solvent-like

- Change in condition
  Melting point/Melting range: undetermined
  Boiling point/Boiling range: undetermined

- Flash point: 32°C (90°F) (ASTM D 93 e e)
- Auto igniting: Product is not self-igniting.

- Danger of explosion:
  Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- Density at 20°C (68°F):
  0.945 - 0.955 g/cm³ (ISO 2811)
Trade name: V1

- Solubility in / Miscibility with
  Water: Not miscible or difficult to mix
- pH-value (100 g/l) at 20°C (68°F): 6.0 - 8.0

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Dangerous reactions
  Reacts with acids, alkalis and oxidizing agents
  Forms flammable gases / fumes
  Possible formation of peroxide
- Dangerous products of decomposition: No dangerous decomposition products known

11 Toxicological information

- Acute toxicity:

  LD/LC50 values that are relevant for classification:

  123-86-4 acetic acid n-hutylester
  Oral LD50 > 4700 mg/kg (rat)*
  Dermal LD50 > 2000 mg/kg (rabbit)
  Inhalative LC50/4 h > 21.0 mg/l (rat)

  68411-30-3 linear alkylbenzenesulfonic acid salt
  Oral LD50 2550 mg/kg (rat)

  34590-94-8 dipropylene glycol monomethylether
  Oral LD50 5130 mg/kg (rat)
  Dermal LD50 > 19000 mg/kg (rabbit)

  108-10-1 4-methylpentan-2-one
  Oral LD50 2100 mg/kg (rat)
  Dermal LD50 16000 mg/kg (rab)
  Inhalative LC50/4 h 8.3-16.6 mg/l (rat)

- Primary irritant effect:
  on the skin: Irritating effects possible
  on the eyes: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  Irritant
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

- General notes:
  Water hazard class 2 (Self-assessment): hazardous for water.
  Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)
Material Safety Data Sheet
acc. to ISO/DIS 11014

Trade name: V1

At present there are no ecotoxicological assessments.

(Contd. of page 5)

13 Waste Disposal Method

- Product and uncleaned packagings:
  - Recommendation:
    Contaminated adsorbent, soil, water must be disposed of in a permitted hazardous waste management facility. Recovered products may be reused, reprocessed or incinerated or must be treated in a permitted hazardous waste management facility. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, the Clean Water Act, RCRA, as well as applicable Federal, State, and local Regulations regarding disposal.

14 Transport information

- DOT regulations:

  - Hazard class:
  - Identification number: UN1993
  - Packing group: III
  - Proper shipping name (technical name): Flammable liquid, n.o.s., butyl acetates
  - Label

- Land transport ADR/RID (cross-border)

  - ADR/RID class: 3 Flammable liquids
  - Item: 31c
  - UN-Number: 1993
  - Description of goods: Flammable liquid, n.o.s., butyl acetates

- Maritime transport IMDG:

  - IMDG Class: 3, 3
  - UN Number: 1993
  - Packaging group: III
  - MF-Ag: 310
  - Proper shipping name: Flammable liquid, n.o.s., butyl acetates

- Air transport ICAO-TI and IATA-DGR:

  - ICAO/IATA Class: 3
  - UN/ID Number: 1993

(Contd. on page 7)
Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/28/2002
Reviewed on 08/28/2002

Trade name: V1

Packaging group: III
Proper shipping name: Flammable liquid, n.o.s., butyl acetates

(Contd. of page 6)

15 Regulatory information (Not meant to be all-inclusive/selected regulations represented)

- Product related hazard informations:
The product has been marked in accordance with national laws.
Observe the general safety regulations when handling chemicals.

- Hazard symbols:
Irritant
Flammable

- Risk phrases:
Flammable.
Risk of serious damage to eyes.

- Safety phrases:
Keep out of the reach of children.
When using do not eat or drink.
Do not breathe fumes / aerosol.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
Wear suitable gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
If swallowed: seek medical advice immediately and show this container or label.

- National regulations
- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Other regulations, limitations and prohibitive regulations
The product has been designed for professional use only.

- Please note:
The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyers responsibility to ensure that their activities comply with Federal, State or provincial and local laws. The following specific information is made for the purpose of complying with numerous laws and regulations.

- U.S. Regulations
- EPA (Environmental Protection Agency)
None of the ingredients is listed.

- IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

- NTP (National Toxicology Program)
None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

- MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

(Contd. on page 8)
Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/28/2002
Reviewed on 08/28/2002

Trade name: V1

OSHA-Cu (Occupational Safety & Health Administration)
None of the ingredients is listed.

SARA Section 305
None of the ingredients is listed.

SARA 313 Information:
This product contains the following substances are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- CAS-No.: Chemical name:
  108-10-1 4-methylpentan-2-one

SARA Hazard Category:
This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
- An immediate health hazard
- Toxic Substances Control Act (TSCA): All ingredients are listed on the TSCA inventory.
- California proposition 65:
The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.
This product contains / does not contain chemical(s) known to the State of California to cause cancer and/or to cause reproductive toxicity.

Chemicals known to cause cancer:

Chemicals known to cause reproductive toxicity:

State right-to-know
The following product component(s) are cited on certain State lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

- CAS-No.: Chemical name: LIST:
  123-86-4 acetic acid n-butylster NYPA-E
  34590-94-8 dipropylene glycol monomethyl ether NYPA
  108-10-1 4-methylpentan-2-one NYPA-E

OSHA hazard communication standard:
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA, or Superfund):
This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

- CAS-No.: Chemical name:
  123-86-4 acetic acid n-butylster
  108-10-1 4-methylpentan-2-one

Canadian regulations

WHMIS information:
The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:
- B2 - Flammable liquid
- D2B - Eye and/or skin irritant

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

CPR statement:
This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

(Contd. on page 9)
Hazardous products act information:
This product contains the following ingredient(s) which are Controlled Products and/or on the Ingredients Disclosure List (Canadian HPA section 13 and 14):
- CAS-No.: Components:
  - 123-86-4 acetic acid n-butyester
  - 34590-94-8 dipropylene glycol monomethyl ether
  - 68411-30-3 linear alkylbenzenesulfonic acid salt
  - 108-10-1 4-methylpentan-2-one

16 Other information:
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Contact: Dr. Ralf Döring
- * Data compared to the previous version altered.
1 Identification of substance:

- **Product details:**
  - **Trade name:** V 2

- **Manufacturer/Supplier:**
  SEITZ GmbH
  Chemische Fabrik
  Gutenbergstr. 3
  D-65830 Kriftel

- **Information department:**
  CHEM-TEL Inc.
  10770 North 46th Street STE. B100
  Temple Terrace
  Tampa Florida 33617
  **Emergency information:** 1-800-255-3924

2 Composition/Data on components:

- **Chemical characterization**
  - **Description:** Mixture of the substances listed below with non-hazardous ingredients.

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>68411-30-3</td>
<td>linear alkylbenzenesulfonic acid salt</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>56-81-5</td>
<td>1,2,3-propanetriol</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>112-34-5</td>
<td>diethylene glycol monobutylether</td>
<td>&lt; 10 %</td>
</tr>
<tr>
<td>64742-48-9</td>
<td>isocanlkes</td>
<td>&lt; 5 %</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Hazard description:**
  Irritant liquid

- **Information pertaining to particular dangers for man and environment**
  Irritating to eyes and skin.

- **Classification system**
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0-4)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

4 First aid measures

- **General information**
  Immediately remove any clothing soiled by the product.
  Remove casualties from exposure.
  Keep unprotected persons away.

- **After inhalation**
  Supply fresh air and to be sure call for a doctor.

- **After skin contact**
  Immediately rinse with water.

- **After eye contact**
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Contd. on page 2)