1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: Human S100A8/S100A9 Heterodimer DuoSet ELISA
Catalog Number: DY8226-05
Components:
- Capture Antibody
- Detection Antibody
- Standard (contains Proclin 300 Mixture = .005%)
- Streptavidin-HRP (contains Proclin 300 Mixture = .005%)

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

Identified Uses: For Research Use Only

1.3 Details of the supplier of the safety data sheet

Company: R&D Systems, Inc. a Bio-Techne Brand
- 614 McKinley Place NE
- Minneapolis, MN 55413, USA
- Telephone: 1-800-343-7475
- Fax: 1-612-656-4400
- Internet: www.rndsystems.com
- Email address: info@bio-techne.com

Canada:
- 461 North Service Rd West
- Unit B37
- Oakville, ON L6M 2V5
- Telephone: 1-855-668-8722
- Fax: 902-827-6402
- Email address: Canada.inquiries@bio-techne.com

United Kingdom:
- 19 Barton Lane
- Abingdon Science Park
- Abingdon, OX14 3NB
- Telephone: 44 (0)1235 529449
- Fax: 44 (0)1235 533420
- Email address: info.emea@bio-techne.com

1.4 Emergency Telephone Number

Emergency Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449

2. HAZARDS IDENTIFICATION

See additional safety data sheets.
2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture


Sensitization, skin - Category 1

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Pictogram(s):

Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.

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

2.3 Other Hazards - None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Index No.</th>
<th>Classification</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclin 300 Mixture = .005%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(active ingredients)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixture of 5-Chloro-2-Methyl-4-</td>
<td>55965-84-9</td>
<td>613-167-00-5</td>
<td></td>
<td>H317</td>
<td>0.005 %</td>
</tr>
<tr>
<td>Isothiazolin-3-One (26172-55-4) and 2-Methyl-4-Isothiazolin-3-One (2682-20-4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
4.1 Description of first aid measures

General Advice
Consult a doctor and show this safety data sheet.

If Inhaled
Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact
Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In Case of Eye Contact
Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If Swallowed
Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

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
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters
Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections
For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end uses
Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate Engineering Controls
Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal Protective Equipment
Eye / Face Protection
Use appropriate safety glasses.

Skin Protection
Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Lyophilized white powder or clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Little to none</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling Point / Range</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Upper / Lower Flammability or Explosive Limits</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available.</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No data available.</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available.</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat, moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidising/reducing agents.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Classified based on available data

Skin Corrosion / Irritation

Classified based on available data

Serious Eye Damage / Irritation

Classified based on available data

Respiratory or Skin Sensitization

Classified based on available data

Germ Cell Mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive Toxicity

Classified based on available data

Specific Target Organ Toxicity - Single Exposure

Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure

Classified based on available data

Aspiration Hazard

Classified based on available data

Symptoms / Routes of Exposure

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion: There may be irritation of the throat.
Skin: There may be mild irritation at the site of contact.
Eyes: There may be irritation and redness.
Delayed / Immediate Effects: No known symptoms.

Additional Information
Classified based on available data

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.

13. DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
Product
Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.
Contaminated Packaging
Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

14. TRANSPORT INFORMATION
Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.
14.1 UN-Number
Does not meet the criteria for classification as hazardous for transport.
14.2 UN proper shipping name
Does not meet the criteria for classification as hazardous for transport.
14.3 Transport hazard class(es)
Does not meet the criteria for classification as hazardous for transport.
14.4 Packaging group
Does not meet the criteria for classification as hazardous for transport.
14.5 Environmental hazards
Does not meet the criteria for classification as hazardous for transport.
14.6 Special precautions for users
Does not meet the criteria for classification as hazardous for transport.
Additional Transport Information
Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
TSCA (Toxic Substances Control Act): Not applicable.
SARA 313: Not applicable.
SARA 311/312: Not applicable.
CERCLA Reportable Quantity: Not applicable.
California Proposition 65:
Proclin 300 Mixture = .005%
Proclin 300 Mixture = .005%
Not applicable.

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been made for this product.
16. OTHER INFORMATION

Further Information

Copyright © 2019 R&D Systems, Inc. a Bio-Techne Brand

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet
1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: Streptavidin-HRP (contains Proclin 300 Mixture = .005%)

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

Identified Uses: For Research Use Only

1.3 Details of the supplier of the safety data sheet

Company: R&D Systems, Inc. a Bio-Techne Brand

614 McKinley Place NE

Minneapolis, MN 55413, USA

Telephone: 1-800-343-7475

Fax: 1-612-656-4400

Internet: www.rndsystems.com

Email address: info@bio-technne.com

Canada: 461 North Service Rd West

Unit B37

Oakville, ON L6M 2V5

Telephone: 1-855-668-8722

Fax: 902-827-6402

Email address: Canada.inquiries@bio-techne.com

United Kingdom: 19 Barton Lane

Abingdon Science Park

Abingdon, OX14 3NB

Telephone: 44 (0)1235 529449

Fax: 44 (0)1235 533420

Email address: info.emea@bio-techne.com

1.4 Emergency Telephone Number

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture


Sensitization, skin - Category 1

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Pictogram(s):

Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.

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

2.3 Other Hazards - None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Index No.</th>
<th>Classification</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclin 300 Mixture = .005% (active 96118-96-6 ingredients)</td>
<td></td>
<td></td>
<td></td>
<td>H317</td>
<td></td>
</tr>
<tr>
<td>Mixture of 5-Chloro-2-Methyl-4-Isothiazolin-3-One (26172-55-4) and 2-Methyl-4-Isothiazolin-3-One (2862-20-4)</td>
<td>55965-84-9</td>
<td>613-167-00-5</td>
<td></td>
<td></td>
<td>0.005 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
**4.1 Description of first aid measures**

**General Advice**
Consult a doctor and show this safety data sheet.

**If Inhaled**
Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

**In Case of Skin Contact**
Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

**In Case of Eye Contact**
Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

**If Swallowed**
Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

**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**
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

---

**5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing Media**
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
In combustion, may emit toxic fumes.

**5.3 Precautions for fire-fighters**
Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

---

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**
Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

**6.2 Environmental precautions**
Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

**6.4 Reference to other sections**
For required PPE see section 8. For disposal see section 13.

---

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**
Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

**7.2 Conditions for safe storage, including any incompatibilities**
Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

**7.3 Specific end uses**
Not applicable.

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**
Components with workplace control parameters
Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate Engineering Controls**
Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

**Personal Protective Equipment**

**Eye / Face Protection**
Use appropriate safety glasses.

**Skin Protection**
Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Lyophilized white powder or clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Little to none</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point / Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
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<td>Evaporation Rate</td>
<td>No data available</td>
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<td>Flammability (Solid, Gas)</td>
<td>No data available</td>
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<tr>
<td>Upper / Lower Flammability or Explosive Limits</td>
<td>No data available</td>
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<td>No data available</td>
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<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat, moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidising/reducing agents.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity
Classified based on available data

Skin Corrosion / Irritation
Classified based on available data

Serious Eye Damage / Irritation
Classified based on available data

Respiratory or Skin Sensitization
Classified based on available data

Germ Cell Mutagenicity
Classified based on available data

Carcinogenicity
Classified based on available data

Reproductive Toxicity
Classified based on available data

Specific Target Organ Toxicity - Single Exposure
Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure
Classified based on available data

Aspiration Hazard
Classified based on available data

Symptoms / Routes of Exposure

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion: There may be irritation of the throat.
Skin: There may be mild irritation at the site of contact.
Eyes: There may be irritation and redness.
Delayed / Immediate Effects: No known symptoms.

Additional Information
Classified based on available data

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.

13. DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
Product
Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.
Contaminated Packaging
Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

14. TRANSPORT INFORMATION
Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.
14.1 UN-Number
Does not meet the criteria for classification as hazardous for transport.
14.2 UN proper shipping name
Does not meet the criteria for classification as hazardous for transport.
14.3 Transport hazard class(es)
Does not meet the criteria for classification as hazardous for transport.
14.4 Packaging group
Does not meet the criteria for classification as hazardous for transport.
14.5 Environmental hazards
Does not meet the criteria for classification as hazardous for transport.
14.6 Special precautions for users
Does not meet the criteria for classification as hazardous for transport.
Additional Transport Information
Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
TSCA (Toxic Substances Control Act): Not applicable.
SARA 313: Not applicable.
SARA 311/312: Not applicable.
CERCLA Reportable Quantity: Not applicable.
California Proposition 65:
Proclin 300 Mixture = .005% 
Not applicable.
15.2 Chemical safety assessment
A Chemical Safety Assessment has not been made for this product.
16. OTHER INFORMATION

Further Information

Copyright © 2019 R&D Systems, Inc. a Bio-Techne Brand

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet