

MANUFACTURER/SUPPLIER:

**TECHNICAL CONCEPTS INTERNATIONAL LIMITED**  
**THE NEUTRALLE CENTRE**  
**PIN GREEN BUSINESS PARK**  
**EASTMAN WAY, STEVENAGE, HERTS, SG1 4UH**

**MATERIAL SAFETY DATA SHEET**  
 ACCORDING TO 91/155/EC (as amended 2001/58/EC)  
 ISSUING DATE: April 2004

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**SECTION 1 - IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

**Product Details.**

**Trade Name:** Technical Concepts  
Neutrale Microburst 3000 metered aerosols  
**Fragrance:** Radiant Sense.

**Use:** Fragranced metered aerosol space sprays designed for use in proprietary automated dispensers.

**Supplier:** Technical Concepts International Ltd.,  
 The Neutrale Centre  
 Pin Green Business Park  
 Eastman Way, Stevenage, Herts, SG1 4UH

Tel: +44 870 5686824  
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**Informing Department:** Technical Services Department

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**SECTION 2 - COMPOSITION/DATA ON COMPONENTS**

**Chemical Characterisation**

**Description:** Mixture of organic solvents, perfume and propane/iso-butane (propellant)

**Dangerous Components:**

| Designation                                  | CAS No.    | EC No.    | Symbol | R-Phrases      | %       |
|--|------------|-----------|--------|----------------|---------|
| Propan-2-ol                                  | 67-63-0    | 200-661-7 | Xi, F  | 11-36-67       | 5 – 10  |
| Ethanol                                      | 67-17-5    | 200-578-6 | F      | 11             | 10 – 15 |
| 1,1,6,7-Tetramethyl-6-acetyldecalene         | 54464-57-2 | 259-174-3 | N      | 51/53          | < 1     |
| Diphenyl ether                               | 101-84-8   | 202-981-2 | Xi, N  | 36/37/38-51/53 | < 1     |
| 2,4-Dimethyl cyclohex-3-ene-1-carboxaldehyde | 68039-49-6 | 268-264-1 | Xi     | 36/38-43-52/53 | < 1     |
| Hexyl Cinnamal                               | 101-86-0   | 202-983-3 | Xi     | 43             | < 1     |
| Hydroxycitronellal                           | 107-75-5   | 203-518-7 | Xi     | 36-43          | < 1     |

**Additional information** For the wording of the listed risk phrases refer to section 16.

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**SECTION 3 - HAZARDS IDENTIFICATION**

**Hazard Designation:** F+ Extremely flammable

**Information pertaining to particular dangers for man and environment:** R12 Extremely flammable

**Classification System** The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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**SECTION 4 - FIRST AID MEASURES**

|                           |   |
|---------------------------|---|
| <b>After inhalation</b>   | Supply fresh air, consult a doctor if symptoms develop.   |
| <b>After skin contact</b> | Remove soaked clothing and launder before reuse. Wash skin with water and soap. If symptoms develop or persist, consult a doctor. |
| <b>After eye contact</b>  | Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.                                  |
| <b>After swallowing</b>   | Rinse mouth. DO NOT INDUCE VOMITING. Consult a doctor.  |

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**SECTION 5 - FIRE FIGHTING MEASURES**

|  |   |
|--|---|
| <b>Suitable Extinguishing Agents:</b>  | CO <sub>2</sub> , extinguishing powder or alcohol-resistant foam. |
| <b>For safety reasons unsuitable extinguishing agents:</b>                               | Water jet.  |
| <b>Special hazards caused by the material, its products of combustion or flue gases:</b> | In case of fire CO may be possible.                               |
| <b>Protective Equipment:</b>   | Wear protective clothing/equipment when fighting fires            |

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

|   |   |
|---|---|
| <b>Person-related safety precautions:</b>     | Wear protective equipment. Keep unprotected persons away.   |
| <b>Measures for environmental protection:</b> | No special measures required.   |
| <b>Measures for cleaning/collecting:</b>      | Ensure adequate ventilation. Absorb liquid components with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust). |

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**SECTION 7 - HANDLING AND STORAGE**

**Handling**

|   |  |
|---|--|
| <b>Information for safe handling:</b>                             | Ensure good ventilation/exhaustion at the workplace.   |
| <b>Information about protection against explosions and fires:</b> | Keep ignition sources away - Do not smoke.<br>Beware: Container is pressurised. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire, even after use.<br>Do not spray on flames or red-hot objects |

**Storage**

|  |   |
|--|---|
| <b>Requirements to be met by storerooms and containers:</b>      | Store in cool location<br>Observe official regulations on storing packagings with pressurised containers. |
| <b>Information about storage in one common storage facility:</b> | Do not store together with strong acids and strong oxidising agents.                                      |
| <b>Further information about storage conditions:</b>             | Protect from heat and direct sunlight.  |

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**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

|  |  |     |  |
|--|--|-----|--|
| <b>Additional information about design of technical systems:</b>                 | No further data; see item 7.   |     |  |
| <b>Components with critical values that require monitoring at the workplace:</b> | The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. |     |  |
| <b>Additional information:</b>   |  |     |  |
| OEL - Values:  | EH40(2002)   |     |  |
|  | Ethanol  | OES | 8hr TWA - 1000 ppm (1920 mg/m <sup>3</sup> )   |
|  | Isopropanol  | OES | 8hr TWA - 400 ppm (999 mg/m <sup>3</sup> )<br>15min STEL 500 ppm (1250 mg/m <sup>3</sup> ) |
|  | Propane  |     | Listed as an asphyxiant with no limit set  |

**Personal protective equipment****General protective and hygienic measures:**

Wash hands during breaks and at the end of the work.

**Breathing equipment:**

Not required, but ensure adequate ventilation when using the product.

**Protection of hands:**

Not required when used as directed.

**Eye protection:**

Not required when used as directed.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

|                |                                     |  |  |
|----------------|-------------------------------------|--|--|
| <b>Form:</b>   | Aerosol                             |  |  |
| <b>Colour:</b> | According to Product specification. |  |  |
| <b>Smell:</b>  | Perfume                             |  |  |

| <u>Value/Range</u> | <u>Unit</u> | <u>Method</u> |
|--------------------|-------------|---------------|
|--------------------|-------------|---------------|

**Change in condition**

|                                     |                 |            |
|-------------------------------------|-----------------|------------|
| <b>Melting point/Melting range:</b> | Not applicable, | as aerosol |
|-------------------------------------|-----------------|------------|

|                                     |                 |            |
|-------------------------------------|-----------------|------------|
| <b>Boiling point/Boiling range:</b> | Not applicable, | as aerosol |
|-------------------------------------|-----------------|------------|

|                     |                 |            |
|---------------------|-----------------|------------|
| <b>Flash point:</b> | Not applicable, | as aerosol |
|---------------------|-----------------|------------|

|                           |                               |  |
|---------------------------|-------------------------------|--|
| <b>Self-flammability:</b> | Product is not self-igniting. |  |
|---------------------------|-------------------------------|--|

|                             |   |  |
|-----------------------------|---|--|
| <b>Danger of explosion:</b> | Product is not explosive. However, formation of explosive air/steam mixtures is possible. |  |
|-----------------------------|---|--|

**Critical values for explosion:**

|               |     |       |
|---------------|-----|-------|
| <b>Lower:</b> | 1.8 | Vol % |
|---------------|-----|-------|

|               |      |       |
|---------------|------|-------|
| <b>Upper:</b> | 19.0 | Vol % |
|---------------|------|-------|

|                         |         |           |     |
|-------------------------|---------|-----------|-----|
| <b>Vapour pressure:</b> | at 20°C | 4.0 ± 0.5 | bar |
|-------------------------|---------|-----------|-----|

|                 |         |               |                   |
|-----------------|---------|---------------|-------------------|
| <b>Density:</b> | at 20°C | 0.619 - 0.645 | g/cm <sup>3</sup> |
|-----------------|---------|---------------|-------------------|

|  |                 |  |  |
|--|-----------------|--|--|
| <b>Solubility in/Miscibility with Water:</b> | Partly miscible |  |  |
|--|-----------------|--|--|

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**SECTION 10 - STABILITY AND REACTIVITY**

|   |   |
|---|---|
| <b>Thermal decomposition/ conditions to be avoided:</b> | No decomposition if used according to instructions. |
| <b>Dangerous reactions:</b>                             | No dangerous reactions known.                       |
| <b>Materials to be avoided:</b>                         | Oxidising agents and strong acids.                  |
| <b>Dangerous products of decomposition:</b>             | In case of fire CO may be possible.                 |

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

|                                 |                             |
|---------------------------------|-----------------------------|
| <b>Acute toxicity:</b>          |                             |
| <b>Primary irritant effect:</b> |                             |
| <b>On the skin:</b>             | Irritation may be possible. |
| <b>On the eye:</b>              | Irritation may be possible. |

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**SECTION 12 - ECOLOGICAL INFORMATION**

|                       |   |
|-----------------------|---|
| <b>General notes:</b> | Water hazard class 1 (Self-assessment): slightly hazardous for water.<br>Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. |
|-----------------------|---|

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

|                              |  |
|------------------------------|--|
| <b>Product:</b>              |  |
| <b>Recommendation:</b>       | Disposal must be made according to local regulations or via a licensed waste contractor. |
| <b>Uncleaned packagings:</b> |  |
| <b>Recommendation:</b>       | Disposal must be made according to local regulations or via a licensed waste contractor. |

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**SECTION 14 - TRANSPORT INFORMATION****Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

|                                |  |
|--------------------------------|--|
| <b>ADR/RID Class:</b>          | 2  |
| <b>UN Number:</b>              | 1950   |
| <b>Correct technical name:</b> | Aerosols (Flammable)   |
| <b>Label:</b>                  | Diamond shaped, framed   |
| <b>Remarks:</b>                | UN 1950 AEROSOLS should be placed inside the diamond shaped label.<br>Goods are classed as "Limited Quantities" and are therefore exempt from ADR regulations. Check local legislation for domestic transport. |

**Maritime transport IMDG/GGVSea**

|                                |  |
|--------------------------------|--|
| <b>IMDG/GGVSea Class:</b>      | 2  |
| <b>UN Number:</b>              | 1950   |
| <b>EMS Number:</b>             | F-D, S-U   |
| <b>Marine Pollutant</b>        | No   |
| <b>Correct technical name:</b> | Aerosols   |
| <b>Remarks</b>                 | "Limited Quantity"<br>AEROSOLS is required according to IMDG regulations |

**Air transport ICAO-TI and IATA-DGR**

|                                |                     |
|--------------------------------|---------------------|
| <b>ICAO/IATA Class:</b>        | 2.1                 |
| <b>UN/ID Number:</b>           | 1950                |
| <b>Correct Technical Name:</b> | Aerosols, flammable |
| <b>Remarks:</b>                | "Limited Quantity"  |

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**SECTION 15 - REGULATORY INFORMATION**

|   |   |
|---|---|
| <b>Designation according to EC Guidelines:</b>        | The product has been labelled in accordance with EC Directives/relevant national laws.  |
|   | For professional use only   |
| <b>Code letter and hazard designation of product:</b> | F+ Extremely flammable.   |
| <b>Risk phrases:</b>                                  | 12 Extremely flammable.   |
| <b>Safety phrases:</b>                                | 2 Keep out of reach of children.<br>16 Keep away from sources of ignition - No smoking.<br>23 Do not breathe spray.<br>51 Use only in well-ventilated areas.                                      |
| <b>Special label phrase:</b>                          | Contains 2,4-Dimethyl cyclohex-3-ene-1-carboxaldehyde, Hexyl cinnamal and Hydroxycitronellal. May cause an allergic reaction.   |
| <b>National regulations:</b>                          |   |
| <b>Special designation of certain preparations:</b>   | Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. |
| <b>Water hazard class:</b>                            | Water hazard class 1 (Self-assessment): slightly hazardous for water.   |

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**SECTION 16 - OTHER INFORMATION**

**R-phrases used in document:**

|           |  |
|-----------|--|
| R11       | Highly flammable   |
| R12       | Extremely flammable  |
| R36       | Irritating to eyes   |
| R36/38    | Irritating to eyes and skin.   |
| R36/37/38 | Irritating to eyes, respiratory system and skin  |
| R43       | May cause sensitisation by skin contact  |
| R51/53    | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment   |
| R52/53    | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R67       | Vapours may cause drowsiness and dizziness   |

This data is based on our present knowledge. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing data specification sheet:** Technical Services Department.

**Contact:** Mr. K. Anderson

**Sources:** Raw material Safety Data sheets  
EH40/2002 Occupational Exposure limits (UK)

Revision data: Rev.7

Rev.7 – Changes to section 14 (marked !).

Rev.6 - Changes to Section 2, 15 & 16

Rev.5 - Changes to Section 2

Rev.4 - Compliance to CHIP 3 and the 2001/58/EC amendments to 91/155/ECC

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