1. **IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Hexane (polymerisation grade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>MAS 2008</td>
</tr>
<tr>
<td>CAS –No.</td>
<td>64742-490-0</td>
</tr>
<tr>
<td>Synonyms</td>
<td>Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich</td>
</tr>
<tr>
<td>Supplier</td>
<td>Masimo Chemicals South Africa (PTY) Ltd</td>
</tr>
<tr>
<td></td>
<td>G9 Arbour Grove Office Park</td>
</tr>
<tr>
<td></td>
<td>10 Oppenheimer Road</td>
</tr>
<tr>
<td></td>
<td>Amanzimtoti, Durban, 4120</td>
</tr>
<tr>
<td>Emergency Telephone - South Africa</td>
<td>+27 (0)82 430 9754</td>
</tr>
<tr>
<td></td>
<td>+27 (0)83 638 0165</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

- **Recommended use**: Industrial Solvent
- **Restrictions on use**: Restricted to professional users.

2. **HAZARDS IDENTIFICATION**

**Classification (REGULATION (EC) No 1272/2008)**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids</td>
<td>Category 2</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Category 3 (Narcotic effects)</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Category 2 (Central nervous system, Peripheral nervous system)</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

**Label elements**

- **Hazard pictograms**: ![Flammable](image), ![Explosion](image), ![Poison](image), ![Harmful](image)
- **Signal word**: Danger
• Health Statement
PHYSICAL HAZARDS:
H225 Highly flammable liquid and vapour.

HEALTH HAZARDS:
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs (Central nervous system, Peripheral nervous system) through prolonged or repeated exposure.

ENVIRONMENTAL HAZARDS:
H411 Toxic to aquatic life with long lasting effects

• Supplemental Hazard
EUH066 Repeated exposure may cause skin dryness or cracking.

• Precautionary Statements
Prevention:
P201 Obtain special instructions before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.

Response:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P331 Do NOT induce vomiting.

Disposal:
P501 Dispose of contents and container to appropriate waste site or reclamer in accordance with local and national regulations.

• Other Hazards
In use, may form flammable/explosive vapour-air mixture. This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Slightly irritating to respiratory system. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Auditory system

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Registration No</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td></td>
<td></td>
<td>F; R11 X1; R38 Repr.Cat.3; R62 Xn; R48/20</td>
<td>Xn; R48/20 R66 R67 N; R51/53</td>
<td>&lt;= 100</td>
</tr>
</tbody>
</table>
For explanation of abbreviations, see section 16.

**Further information**
Contains:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identification Number</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>110-54-3, 203-777-6</td>
<td>&lt;= 55</td>
</tr>
<tr>
<td>Hexane, other isomers</td>
<td></td>
<td>&gt;= 45</td>
</tr>
</tbody>
</table>

4. **FIRST-AID MEASURES**

- **General Advice**
  DO NOT DELAY.
  Keep victim calm. Obtain medical treatment immediately.

- **If Inhalation**
  Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

- **In case of Skin Contact**
  Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

- **In case of Eye Contact**
  Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

- **If Swallowed**
  If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3° C), shortness of breath, chest congestion or continued coughing or wheezing.

- **Most Important Symptoms and Effects, Both Acute and Delay**
  Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.

  Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. If material enters lungs, signs and
symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.

The onset of respiratory symptoms may be delayed for several hours after exposure.

- Protection for First-Aiders
  When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

- Notes to Physician
  Potential for chemical pneumonitis. Call a doctor or poison control centre for guidance. Potential for cardiac sensitisation, particularly in abuse situations. Hypoxia or negative inotropes may enhance these effects. Consider oxygen therapy. Causes central nervous system depression. Dermatitis may result from prolonged or repeated exposure.

5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media
  Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

- Unsuitable Extinguishing Media
  Do not use water in a jet.

- Specific hazards during fire fighting
  Clear fire area of all non-emergency personnel. Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Flammable vapours may be present even at temperatures below the flash point. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water.

- Specific extinguishing methods
  Standard procedure for chemical fires. Keep adjacent containers cool by spraying with water.

- Special protective equipment for firefighters
  Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).
6. ACCIDENTAL RELEASE MEASURE

- Personal Precautions, Protective Equipment and Emergency Procedures
  Observe all relevant local and international regulations.
  Notify authorities if any exposure to the public or the environment occurs or is likely to occur.
  Local authorities should be advised if significant spillages cannot be contained.
  Avoid contact with skin, eyes and clothing.
  Isolate hazard area and deny entry to unnecessary or unprotected personnel.
  Do not breathe fumes, vapour.
  Do not operate electrical equipment.

- Environmental Precautions
  Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
  Monitor area with combustible gas indicator.

- Methods And Materials For Containment and Cleaning Up
  For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
  For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
  Ventilate contaminated area thoroughly. If contamination of site occurs, remediation may require specialist advice.

- Additional Advice
  For guidance on selection of personal protective equipment, see Chapter 8 of this Safety Data Sheet.
  For guidance on disposal of spilled material, see Chapter 13 of this Safety Data Sheet.

7. HANDLING AND STORAGE

- General Precautions
  Avoid breathing of or direct contact with material. Only use in well-ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment, see Chapter 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling.
storage and disposal of this material. Ensure that all local regulations regarding handling and storage facilities are followed.

- **Advice On Safe Handling**
  Avoid inhaling vapour and/or mists.
  Avoid contact with skin, eyes and clothing.
  Extinguish any naked flames. Do not smoke. Remove ignition sources.
  Avoid sparks.
  Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.
  Bulk storage tanks should be diked (bunded).
  When using do not eat or drink

  The vapour is heavier than air, spreads along the ground and distant ignition is possible.

- **Avoidance Of Contact**
  Strong oxidising agents

- **Product Transfer**
  Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation.
  Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/s until fill pipe submerged to twice its diameter, then ≤ 7 m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

  Refer to guidance under handling section

**Storage**

- **Conditions For Safe Storage**
  Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

- **Other Data**
  **Storage Temperature:** Ambient.
  Bulk storage tanks should be diked (bunded).
  Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.
  Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products, which are not harmful or toxic to man or, to the environment.
  Electrostatic charges will be generated during pumping.
Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapours in the headspace of the storage vessel may lie in the flammable/explosive range and hence may be flammable.

- **Packing Material**
  
  Suitable material: For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint

- **Container Advice**
  
  Do not cut, drill, grind, weld or perform similar operations on or near containers.

- **Specific Use(s)**

  Not applicable

  See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices on Static Electricity). IEC/TS 60079-32-1: Electrostatic hazards, guidance

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP Technical Hexane</td>
<td>Not Assigned</td>
<td>TWA</td>
<td>300 mg/m³</td>
<td>OEL based on European Hydrocarbon Solvents Producers (CEFIC-HSPA) methodology</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>TWA OEL-RL</td>
<td>20 ppm 70 mg/m³</td>
<td>ZA OEL</td>
</tr>
</tbody>
</table>

Further information: Recommended Limit

#### Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>2,5-Hexanenedione</td>
<td>Urine</td>
<td>End of shift</td>
<td>5.0 mg/g Creatinine</td>
<td>ZA BEI</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>End exhaled air</td>
<td></td>
<td></td>
<td>ZA BEI</td>
</tr>
</tbody>
</table>
Monitoring Methods
Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances, biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier.

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/
Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany. http://www.dguv.de/inhalt/index.jsp
L’Institut National de Recherche et de Sécurité, (INRS), France http://www.inrs.fr/accueil

Engineering Measures
The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.
Appropriate measures include:
Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended.

Firewater monitors and deluge systems are recommended.
Eyewashes and showers for emergency use.
Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:
Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking.
Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.
Practice good housekeeping.
Define procedures for safe handling and maintenance of controls. Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or subsequent recycle.

Personal Protective Equipment
Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Respiratory Protection
If engineering controls do not maintain airborne concentrations to a level, which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
Check with respiratory protective equipment suppliers.
Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
If air-filtering respirators are suitable for conditions of use:
Select a filter suitable for organic gases and vapours [Type A boiling point >65°C (149°F)].

Hand Protection
Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection.
Longer-term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves. For continuous contact, we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye Protection
If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection
Wear chemical resistant gloves/gauntlets and boots. Where risk of splashing, also wear an apron.
Wear antistatic and flame retardant clothing, if a local risk assessment deems it so.

Thermal Hazard
Not applicable
Hygiene Measures
Wash hands before eating, drinking, smoking and using the toilet. Launder contaminated clothing before re-use.
Do not ingest. If swallowed then seek immediate medical assistance

Environmental Exposure Controls
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation. Information on accidental release measures are to be found in section 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Paraffinic, sweet</td>
</tr>
<tr>
<td>pH</td>
<td>Data not available</td>
</tr>
<tr>
<td>Melting / Freezing Point pour point</td>
<td>-95 °C / -139 °F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Typical 65 - 69 °C / 149 - 156 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Typical -27 °C / -17 °F (IP170)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper Explosion Limits</td>
<td>1,1 %(V)</td>
</tr>
<tr>
<td>Lower Explosion Limits</td>
<td>7,4 %(V)</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Typical 19.000 Pa (20 °C / 68 °F)</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>2,8</td>
</tr>
<tr>
<td>Relative density</td>
<td>0,66</td>
</tr>
<tr>
<td>Density</td>
<td>Typical 675 kg/m3 (15 °C / 59 °F)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>9,5 mg/l Negligible.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>log Pow: 4</td>
</tr>
<tr>
<td>Auto-Ignition temperature</td>
<td>Data not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Data not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Typical 0,45 mm2/s (25 °C / 77 °F)</td>
</tr>
<tr>
<td>Viscosity, Kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
| Conductivity                                  | The conductivity of this material makes it a static accumulator. A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is
nonconductive or semi-conductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

| Molecular weight | 86 g/mol |

10. STABILITY AND REACTIVITY

- Reactivity
  The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

- Chemical Stability
  No hazardous reaction is expected when handled and stored according to provisions Stable under normal conditions of use.

- Possibility of Hazardous Reactions
  Reacts with strong oxidising agents

- Conditions to Avoid
  Avoid heat, sparks, open flames and other ignition sources.
  In certain circumstances product can ignite due to static electricity.

- Incompatible Materials
  Strong oxidising agents

  - Hazardous Decomposition Products
    Hazardous decomposition products are not expected to form during normal storage.
    Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

- Basis for Assessment
  Information given is based on product testing, and/or similar products, and/or components.

- Information on likely Route of Exposure
  Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact and accidental ingestion.

- Acute Oral Toxicity
  Low toxicity: LD50 >2000 mg/kg, Rat
  Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis, which can be fatal.
• Acute Inhalation Toxicity
  LC50 Rat: > 20 mg/l
  Remarks: Low toxicity by inhalation.

• Acute Dermal Toxicity
  LD50 Rabbit: > 2000 mg/kg
  Remarks: Low toxicity:

• Skin Corrosion/Irritation
  Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

• Serious Eye Damage / Eye Damage
  Not irritating to eye. Vapours may be irritating to the eye

• Respiratory or Skin Sensitisation
  Not expected to be a sensitiser.

• Germ Cell Mutagenicity
  Not mutagenic

• Carcinogenicity
  Not expected to be carcinogenic. Tumours produced in animals are not considered relevant to humans

<table>
<thead>
<tr>
<th>Material</th>
<th>GHS/CLP Carcinogenicity Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>No carcinogenicity classification.</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>No carcinogenicity classification.</td>
</tr>
</tbody>
</table>

• Reproductive Toxicity
  Suspected of damaging fertility or the unborn child. Causes oototoxicity in animals at doses, which are maternally toxic. Affects reproductive system in animals at doses, which produce other toxic effects.

• STOT – Single Exposure
  May cause drowsiness and dizziness.

• STOT – Repeated Exposure
  Central nervous system: repeated exposure affects the nervous system.
  Peripheral nervous system: causes peripheral neuropathy, which can be potentiated by ketones. Kidney: caused kidney effects in male rats, which are not considered relevant to humans.

• Aspiration Toxicity
  Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis, which can be fatal

• Further Information
  Classifications by other authorities under varying regulatory frameworks may exist.
12. TOXICOLOGICAL INFORMATION

**Acute Toxicity**
- Fish: Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l
- Algae / Aquatic Plants: Expected to be harmful: LC/EC/IC50 >10-<=100 mg/l
- Microorganisms: Data not available

**Chronic Toxicity**
- Fish: Data not available
- Crustacean: Data not available
- Persistence and degradability: Biodegradability Oxidises rapidly by photochemical reactions in air.

**Bioaccumulation**
- Has the potential to bioaccumulation
- Partition coefficient: n-octanol/water: log Pow: 4

**Mobility in Soil**
- Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile

**Other adverse effects**
- No Data available

**Additional Ecological Information**
- In view of the high rate of loss from solution, the product is unlikely to pose a significant hazard to aquatic life.
- Not expected to have ozone depletion potential.

13. DISPOSAL CONSIDERATIONS

**Waste from residues**
- Recover or recycle if possible.
- It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
- Do not dispose into the environment, in drains or in watercourses
- Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.
- Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Local regulations may be more stringent than regional or national requirements and must be complied with.

**Contaminated packing**
- Drain container thoroughly.
- After draining, vent in a safe place away from sparks and fire.
Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.
Send to drum recover or metal reclaimer.
Comply with any local recovery or waste disposal regulations.

14. TRANSPORT INFORMATION

IATA –DGR

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>UN 1208</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>HEXANES</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Labels</td>
<td>3</td>
</tr>
</tbody>
</table>

IMDG-Code

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>UN 1208</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>HEXANES</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Labels</td>
<td>3</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Transport in bulk according to Annex II of Marpol 73/78 and IBC Code

<table>
<thead>
<tr>
<th>Pollution category</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship type</td>
<td>2</td>
</tr>
<tr>
<td>Product name</td>
<td>Hexane (all isomers)</td>
</tr>
</tbody>
</table>

• Special Precautions for User
Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions, which a user needs to be aware of or needs to comply with in connection with transport.

• Additional Information
This product may be transported under nitrogen blanketing.
Nitrogen is an odourless and invisible gas. Exposure to nitrogen-enriched atmospheres displaces available oxygen, which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space entry.

15. REGULATORY INFORMATION

• Safety, health and environmental regulations/legislation specific for the substance or mixture. The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

• The components of this product are reported in the following inventories:
AICS : Listed
DSL : Listed
IECSC : Listed
KECI : Listed
NZIoC : Listed
EINECS : Listed
TSCA : Listed

16. OTHER INFORMATION

Full text of R-Phrases

<table>
<thead>
<tr>
<th>R-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R11</td>
<td>Highly flammable.</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin.</td>
</tr>
<tr>
<td>R48/20</td>
<td>Harmful: danger of serious damage to health by prolonged exposure through inhalation.</td>
</tr>
<tr>
<td>R51/53</td>
<td>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
<tr>
<td>R62</td>
<td>Possible risk of impaired fertility.</td>
</tr>
<tr>
<td>R65</td>
<td>Harmful: may cause lung damage if swallowed.</td>
</tr>
<tr>
<td>R66</td>
<td>Repeated exposure may cause skin dryness or cracking.</td>
</tr>
<tr>
<td>R67</td>
<td>Vapours may cause drowsiness and dizziness.</td>
</tr>
</tbody>
</table>

Full text of H-Statements

<table>
<thead>
<tr>
<th>H-Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUH066</td>
<td>Repeated exposure may cause skin dryness or cracking.</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td>H361</td>
<td>Suspected of damaging fertility or the unborn child.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

Full text of other abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic</td>
<td>Chronic aquatic toxicity</td>
</tr>
<tr>
<td>Asp. Tox.</td>
<td>Aspiration hazard</td>
</tr>
<tr>
<td>Flam. Liq.</td>
<td>Flammable liquids</td>
</tr>
<tr>
<td>Repr.</td>
<td>Reproductive toxicity</td>
</tr>
<tr>
<td>Skin Irrit.</td>
<td>Skin irritation</td>
</tr>
<tr>
<td>STOT RE</td>
<td>Specific target organ toxicity - repeated exposure</td>
</tr>
<tr>
<td>STOT SE</td>
<td>Specific target organ toxicity - single exposure</td>
</tr>
</tbody>
</table>
• Abbreviations and Acronyms
  The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

SDS Regulations
• Training Advice
  Provide adequate information, instruction and training for operators.

• Other Information
  A vertical bar (|) in the left margin indicates an amendment from the previous version.

Due to a change of detail in Section 1, this document has been released as a significant change.

• Source of key data used to compile the Safety Data Sheet
  The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Health Services, material suppliers’ data, CONCAWE, EU IUCLID date base, EC 1272 regulation, etc).

  This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.