

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

Product name	MasimoSol D70
Product Code	MAS 2004
Registration number	01-2119456620-43-002
Synonyms	Hydrocarbons, V11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics
CAS –No.	64742-490-0
EC-No.	926-141-6
Supplier	Masimo Chemicals South Africa (PTY) Ltd G9 Arbour Grove Office Park 10 Oppenheimer Road Amanzimtoti, Durban,4120
Emergency Telephone - South Africa	+27 (0)82 430 9754 +27 (0)83 638 0165

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

Recommended use	Industrial Solvent Please refer to Ch16 for the registered uses under REACH.
Restrictions on use	This product must not be used in applications other than the above without first seeking the advice of the supplier.

**2. HAZARDS IDENTIFICATION**

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

Hazard pictograms :



Signal word : Danger

- Health Statement

**PHYSICAL HAZARDS:**

Not classified as a physical hazard according to CLP criteria.

**HEALTH HAZARDS:**

H304 May be fatal if swallowed and enters airways.

**ENVIRONMENTAL HAZARDS:**

Not classified as a physical hazard according to CLP criteria.

- Supplemental Hazard

EUH066 Repeated exposure may cause skin dryness or cracking.

- Precautionary Statements

**Prevention:**

P243 Take precautionary measures against static discharge.

**Response:**

P301+ P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P331 Do NOT induce vomiting.

**Disposal:**

P40 Store locked up

Disposal"

P501 Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national

- Other Hazards

The substance does not fulfil all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered PBT or vPvB. 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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

**Hazardous components**

Chemical name	CAS-No. EC-No.	Concentration [%]
Hydrocarbons, C11-C14, n- alkanes, isoalkanes, cyclic < 2% aromatics	64742-47-8 926-141-6	100

### 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.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If persistent irritation occurs, obtain medical attention
- **If Swallowed**  
Call emergency number for your location / facility.  
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**  
If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.  
Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.

## 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.
  - 6.1.1 For non-emergency personnel:  
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.
  - 6.1.2 For emergency responders:  
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.

- Reference to other sections  
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.
- Product Transfer  
Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, 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 ( $\leq 1$  m/s until fill pipe submerged to twice its diameter,

then  $\leq 7$  m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

**Storage**

- Requirements for storage areas and containers

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  
Unsuitable material: Avoid prolonged contact with natural, butyl or nitrile rubbers.

- Container Advice

Do not cut, drill, grind, weld or perform similar operations on or near containers.

- Specific Use(s)

Please refer to Ch16 and/or the annexes for the registered uses under REACH.

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**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
RCP Dearom. Mineral spirits 175 - 220		TWA	1.200 mg/m3	EU HSPA

- Biological occupational exposure limits

No biological limit allocated

- Derived No Effect Level (DNEL) according to Regulation (EC) no. 1907/2006:  
No DNEL value has been established
- Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:  
Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.
- 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.  
Further national methods may be available. National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods. <http://www.cdc.gov/niosh/> Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods <http://www.osha.gov/> Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances, <http://www.hse.gov.uk/> 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.

- **Eye Protection**

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

- **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.

- **Skin and body protection**

Skin protection is not required under normal conditions of use. For prolonged or repeated exposures use impervious clothing over parts of the body subject to exposure. If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

Protective clothing approved to EU Standard EN14605

Wear antistatic and flame retardant clothing, if a local risk

- **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)].

- **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**  
Take appropriate measures to fulfil the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to wastewater. Wastewater should be treated in a municipal or industrial wastewater treatment plant before discharge to surface water,  
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

Appearance	Liquid
Colour	Colourless
Odour	Paraffinic
Odour Threshold	Data not available
pH	Not applicable
Melting / Freezing Point pour point	< -50 °C
Boiling point and boiling range	Typical 193 - 245 °C
Flash Point	Typical 73 °C Method: ASTM D-93 / PMCC
Evaporation rate	800 Method: DIN 53170, di-ethyl ether=1

	0,01 Method: ASTM D 3539, nBuAc=1
Upper Explosion Limits	5,5 %(V)
Lower Explosion Limits	0,6 %(V)
Vapour Pressure	19 - 25 Pa (20 °C) 400 Pa (50 °C)
Relative vapour density	Data not available
Relative density	Data not available
Density	Typical 792 kg/m <sup>3</sup> (20 °C) Method: ASTM D4052  Typical 787 kg/m <sup>3</sup> (15 °C) Method: ASTM D4052
Solubility (ies)	
Water Solubility	Insoluble
Partition coefficient: n-octanol/water	log Pow: 6 - 8,2
Auto-ignition temperature	236 °C
Decomposition temperature	Data not available
Viscosity	
Viscosity, dynamic	Data not available
Viscosity, Kinematic	Typical 1,97 mm <sup>2</sup> /s (25 °C)
Explosive properties	Not classified
Oxidising properties	Data not available
Surface tension	Typical 29 mN/m, 20 °C, ASTM D-971
Conductivity	Low conductivity: < 100 pS/m  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	174 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
- **Acute Inhalation Toxicity**  
LC50 Rat: Exposure time: 4 h  
Low toxicity:  
LC50 greater than near- saturated vapour concentration
- **Acute Dermal Toxicity**  
LD50 Rabbit: > 5000 mg/kg  
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.
- 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

Material	GHS/CLP Carcinogenicity Classification
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics <2% aromatics	No carcinogenicity classification.

- Reproductive Toxicity  
Not expected to be a developmental toxicant  
Not expected to impair fertility
- STOT – Single Exposure  
Not expected to be hazard
- STOT – Repeated Exposure  
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.

**Summary on evaluation of the CMR properties**

- Germ Cell mutagenicity Assessment  
This product does not meet criteria for classification in categories 1A/1B
- Carcinogenicity Assessment  
This product does not meet criteria for classification in categories 1A/1B
- Reproductive Toxicity Assessment  
This product does not meet criteria for classification in categories 1A/1B

**12. TOXICOLOGICAL INFORMATION**

Acute Toxicity

- Fish Practically non toxic: LL/EL/IL50 > 100 mg/l

- Crustacean
- Algae / Aquatic Plants
- Microorganisms

Practically non toxic: LL/EL/IL50 > 100 mg/l  
Practically non toxic: LL/EL/IL50 > 100 mg/l  
Data not available

Chronic Toxicity

- Fish
- Crustacean

Data not available

Data not available

- Persistence and degradability

Biodegradability  
Expected to be readily biodegradable. Oxidises rapidly by photochemical reactions in air.

- Bioaccumulation

Has the potential to bioaccumulation  
Partition coefficient: n-octanol/water:  
log Pow: 6 - 8,2

- Mobility in Soil

Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile

- Results of PBT and vPvB assessment

The substance does not fulfil all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

- Other adverse effects

No Data available

**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**

**Proper shipping name**

ADN : SUBSTANCES WITH FLASHPOINT > 60°C BUT NOT MORE THAN 100 °C (HYDROCARBON MIXTURE.)  
 ADR : Not regulated as a dangerous good  
 RID : Not regulated as a dangerous good  
 IMDG : Not regulated as a dangerous good  
 IATA : Not regulated as a dangerous good

**Transport hazard class**

ADN : 9  
 ADR : Not regulated as a dangerous good  
 RID : Not regulated as a dangerous good  
 IMDG : Not regulated as a dangerous good  
 IATA : Not regulated as a dangerous good

**Packing group**

ADN :  
 Packing group : Not Assigned  
 Labels : 9 (F)  
 CDNI Inland Water Waste Agreement : NST 8963 Solvent  
 ADR : Not regulated as a dangerous good  
 RID : Not regulated as a dangerous good  
 IMDG : Not regulated as a dangerous good  
 IATA : Not regulated as a dangerous good

**Environmental hazard**

ADN :  
 Environmentally hazardous : No  
 ADR : Not regulated as a dangerous good  
 RID : Not regulated as a dangerous good  
 IMDG : Not regulated as a dangerous good  
 IATA : Not regulated as a dangerous good

**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.

- Transport in bulk according to Annex II of Marpol 73/78 and IBC Code
  - Pollution category : Annex I
  - Ship type : Annex I or Double hull vessels with carriage of oil certificate
  - Product name : Petroleum naphtha
- 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
ENCS	: Listed
KECI	: Listed
NZIoC	: Listed
PICCS	: Listed
TCSI	: Listed
TSCA	: Listed

## 16. OTHER INFORMATION

- 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
  - ACGIH = American Conference of Governmental Industrial Hygienists
  - ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
  - AICS = Australian Inventory of Chemical Substances

ASTM = American Society for Testing and Materials  
BEL = Biological exposure limits  
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes  
CAS = Chemical Abstracts Service  
CEFIC = European Chemical Industry Council  
CLP = Classification Packaging and Labelling  
COC = Cleveland Open-Cup  
DIN = Deutsches Institut für Normung  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
DSL = Canada Domestic Substance List  
EC = European Commission  
EC50 = Effective Concentration fifty  
ECETOC = European Centre on Ecotoxicology and Toxicology Of Chemicals  
ECHA = European Chemicals Agency  
EINECS = The European Inventory of Existing Commercial Chemical Substances  
EL50 = Effective Loading fifty  
ENCS = Japanese Existing and New Chemical Substances Inventory  
EWC = European Waste Code  
GHS = Globally Harmonised System of Classification and Labelling of Chemicals  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IC50 = Inhibitory Concentration fifty  
IL50 = Inhibitory Level fifty  
IMDG = International Maritime Dangerous Goods  
INV = Chinese Chemicals Inventory  
IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables  
KECI = Korea Existing Chemicals Inventory  
LC50 = Lethal Concentration fifty  
LD50 = Lethal Dose fifty per cent.  
LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading  
LL50 = Lethal Loading fifty  
MARPOL = International Convention for the Prevention of Pollution From Ships  
NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level  
OE\_HP V = Occupational Exposure - High Production Volume  
PBT = Persistent, Bioaccumulative and Toxic  
PICCS = Philippine Inventory of Chemicals and Chemical Substances  
PNEC = Predicted No Effect Concentration  
REACH = Registration Evaluation And Authorisation Of Chemicals  
RID = Regulations Relating to International Carriage of Dangerous Goods by Rail  
SKIN\_DES = Skin Designation  
STEL = Short term exposure limit  
TRA = Targeted Risk Assessment  
TSCA = US Toxic Substances Control Act  
TWA = Time-Weighted Average  
vPvB = very Persistent and very Bioaccumulative

#### **Further Information**

The eSDS(s) received to date have been reviewed for the registered components in this mixture. The advice provided in the body of this SDS covers all necessary Risk Management Measures.



For Industry, guidance and tools on REACH please visit the CEFIC website at <http://cefic.org/Industry-support>.

The substance does not fulfil all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

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

This product is classified as R65 (Harmful: may cause lung damage if swallowed) respectively H304 (May be fatal if swallowed and enters airways). The risk relates to potential for aspiration. The risk arising from aspiration hazard is solely related to the physico-chemical properties of the substance. The risk can therefore be controlled by implementing risk management measures tailored to this specific hazard and included within Chapter 8 of the SDS. An exposure scenario is not presented.

This product is classified as R66 / EUH066 (Repeated exposure may cause skin dryness or cracking). The risk relates to the potential for repeated or prolonged dermal contact. The risk arising from contact is solely related to the physico-chemical properties of the substance. The risk can therefore be controlled by implementing risk management measures tailored to this specific hazard and included within Chapter 8 of the SDS. An exposure scenario is not presented.

- 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 data base, EC 1272 regulation, etc).

**Identified Uses according to the Use Descriptor System Uses - Worker**

Title	Industrial Manufacture of substance Distribution of substance Formulation & (re)packing of substances and mixtures Uses in Coatings Use in Cleaning Agents Use in Oil and Gas field drilling and production operations Lubricants Metal working fluids / rolling oils Use as binders and release agents Use as a fuel Functional Fluids Use in laboratories Water treatment chemicals Mining chemicals
-------	--

**Uses - Worker**

Title	Professional Uses in Coatings Use in Cleaning Agents Lubricants Metal working fluids / rolling oils
-------	---

---

Use as binders and release agents  
Use in Agrochemicals uses  
Use as a fuel  
Functional Fluids  
Road and construction applications  
Use in laboratories  
Water treatment chemicals

**Uses - Consumer**

Title	Consumer
	Uses in Coatings
	Use in Cleaning Agents
	Lubricants
	Use in Agrochemicals uses
	Use as a fuel
	Functional Fluids
	Other Consumer Uses

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.