



# Miraplate liquid

## Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010  
Issue date: 5/6/2024 Revision date: 5/6/2026 Version: 1.1

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Miraplate liquid  
Type of product : Polishing agent  
Product code : SH44, SH297, SH09, SH21, SH08  
Product group : Trade product

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

Use of the substance/mixture :

#### 1.3. Supplier's details

##### Manufacturer

Shield Chemicals (Pty) Ltd  
9 London Rd Apex  
P.O. Box 1939  
1501 Benoni – Gauteng  
South Africa  
T (011) 421 7111  
Contact: Jayson Clark

#### 1.4. Emergency telephone number

Emergency number : (011) 421 7111

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS

Flammable liquids, Category 3	H226
Skin corrosion/irritation Not classified	
Germ cell mutagenicity, Category 1B	H340
Carcinogenicity, Category 1B	H350
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard Not classified	
Hazardous to the aquatic environment – Chronic Hazard Not classified	
Full text of H-statements: see section 16	

#### 2.2. Label elements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :



Signal word (GHS-ZA) : Danger  
Hazardous ingredients : nonane, Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy  
Hazard statements (GHS ZA) : H226 - Flammable liquid and vapour  
H340 - May cause genetic defects  
H350 - May cause cancer  
H373 - May cause damage to organs through prolonged or repeated exposure  
Precautionary statements (GHS ZA) : P203 - Obtain, read and follow all safety instructions before use.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.

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P233 - Keep container tightly closed.  
P240 - Ground and bond container and receiving equipment.  
P241 - Use explosion-proof equipment.  
P242 - Use non-sparking tools.  
P243 - Take action to prevent static discharges.  
P260 - Do not breathe dusts or mists.  
P280 - Wear eye protection, protective clothing, protective gloves.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].  
P318 - IF exposed or concerned, get medical advice.  
P319 - Get medical help if you feel unwell.  
P370+P378 - In case of fire: Use sand, foam, carbon dioxide (CO<sub>2</sub>), dry extinguishing powder to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents and container to a hazardous or special waste collection point.

### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Flammable liquid and vapour, May cause cancer, May cause genetic defects, May cause damage to organs through prolonged or repeated exposure.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
nonane	CAS-No.: 111-84-2	6.0 - 12.0	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 STOT RE 2, H373 Aquatic Acute 1, H400
Decane	CAS-No.: 124-18-5	6.0 - 12.0	Flam. Liq. 3, H226 Acute Tox. 5 (Dermal), H313
Undecane	CAS-No.: 1120-21-4	2.0 - 8.0	Flam. Liq. 4, H227 Acute Tox. 5 (Dermal), H313
Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy	CAS-No.: 64742-82-1	1.0 - 3.0	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304
Kerosine (petroleum)	CAS-No.: 8008-20-6	0.1 - 1.0	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 STOT RE Not classified Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to the United Nations GHS
heptane	CAS-No.: 142-82-5 EC Index-No.: 601-008-00-2	0.2 - 0.9	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
methylcyclohexane	CAS-No.: 108-87-2 EC Index-No.: 601-018-00-7	0.2 - 0.9	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
octane	CAS-No.: 111-65-9	0.1 - 0.5	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
toluene	CAS-No.: 108-88-3 EC Index-No.: 601-021-00-3	0.01 - 0.09	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
xylene	CAS-No.: 1330-20-7 EC Index-No.: 601-022-00-9	0.01 - 0.09	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

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Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

#### 6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

methylcyclohexane (108-87-2)	
South Africa - Occupational Exposure Limits (Restricted Limits)	
Local name	Methylcyclohexane

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<b>methylcyclohexane (108-87-2)</b>	
RHCA - STEL/C [ppm]	800 ppm
Regulatory reference	Government Notice No. R. 280, 2021
<b>South Africa - Occupational Exposure Limits (Airborne Pollutants)</b>	
Local name	Methylcyclohexane
OEL TWA	1600 mg/m <sup>3</sup>
OEL TWA	400 ppm
OEL STEL	2000 mg/m <sup>3</sup>
OEL STEL	500 ppm
Regulatory reference	Government Notice No. R 904
<b>toluene (108-88-3)</b>	
<b>South Africa - Occupational Exposure Limits (Restricted Limits)</b>	
Local name	Toluene
OEL eight hour TWA [ppm]	150 ppm
OEL eight hour TWA	560 mg/m <sup>3</sup>
RHCA - STEL/C [ppm]	40 ppm 50 ppm
RHCA - STEL/C	188 mg/m <sup>3</sup>
Remark	SKIN (danger of cutaneous absorption) Sk
Regulatory reference	Government Notice No. R. 280, 2021 Government Notice. R: 1179
<b>South Africa - Occupational Exposure Limits (Airborne Pollutants)</b>	
Local name	Toluene
OEL TWA	188 mg/m <sup>3</sup>
OEL TWA	50 ppm
OEL STEL	560 mg/m <sup>3</sup>
OEL STEL	150 ppm
Remark	Sk (Danger of cutaneous absorption)
Regulatory reference	Government Notice No. R 904
<b>xylene (1330-20-7)</b>	
<b>South Africa - Occupational Exposure Limits (Airborne Pollutants)</b>	
Local name	Xylene, o-, m-, p- or mixed isomers
OEL TWA	218 mg/m <sup>3</sup>
OEL TWA	50 ppm
OEL STEL	435 mg/m <sup>3</sup>
OEL STEL	100 ppm
Remark	Sk (Danger of cutaneous absorption)
Regulatory reference	Government Notice No. R 904

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

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Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves  
Eye protection : Safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Appearance : Viscous liquid.  
Colour : light brown.  
Odour : No data available  
Odour threshold : No data available  
pH : 8.5 – 9.5  
pH solution : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Relative evaporation rate (ether=1) : No data available  
Melting point : Not applicable  
Freezing point : No data available  
Boiling point : No data available  
Flash point :  $\approx 45\text{ }^{\circ}\text{C}$   
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability : Flammable liquid and vapour.  
Vapour pressure : No data available  
Vapour pressure at 50°C : No data available  
Relative vapour density at 20°C : No data available  
Relative density : No data available  
Relative density of saturated gas/air mixture : No data available  
Density : No data available  
Relative gas density : No data available  
Solubility : No data available  
Partition coefficient n-octanol/water (Log Pow) : No data available  
Partition coefficient n-octanol/water (Log Kow) : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : 3600 – 4600 mPa·s  
Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available  
Lower explosion limit : No data available  
Upper explosion limit : No data available

### 9.2. Other information

No additional information available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

<b>nonane (111-84-2)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	17 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 14 - 21
<b>Undecane (1120-21-4)</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
<b>Decane (124-18-5)</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
<b>Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
<b>Kerosine (petroleum) (8008-20-6)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)

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<b>Kerosine (petroleum) (8008-20-6)</b>	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.28 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 0,42 -
<b>heptane (142-82-5)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 29.29 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), > 4 day(s))
<b>octane (111-65-9)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 24.88 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Skin corrosion/irritation	: Not classified. pH: 8.5 – 9.5
Serious eye damage/irritation	: Not classified pH: 8.5 – 9.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
<b>heptane (142-82-5)</b>	
STOT-single exposure	Not available
<b>methylcyclohexane (108-87-2)</b>	
STOT-single exposure	Not available
<b>octane (111-65-9)</b>	
STOT-single exposure	Not available
<b>toluene (108-88-3)</b>	
STOT-single exposure	Not available
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
<b>nonane (111-84-2)</b>	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (subchronic, oral, animal/male, 90 days)	100 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
<b>Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)</b>	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.



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<b>Kerosine (petroleum) (8008-20-6)</b>	
NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight Animal: rat, Animal sex: female
NOAEC (inhalation, rat, vapour, 90 days)	≥ 0.024 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
<b>octane (111-65-9)</b>	
NOAEC (inhalation, rat, vapour, 90 days)	24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
<b>toluene (108-88-3)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
<b>nonane (111-84-2)</b>	
Animal studies and expert judgment for classification	False
<b>Undecane (1120-21-4)</b>	
Animal studies and expert judgment for classification	False
<b>Decane (124-18-5)</b>	
Animal studies and expert judgment for classification	False
<b>Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)</b>	
Animal studies and expert judgment for classification	False
<b>Kerosine (petroleum) (8008-20-6)</b>	
Animal studies and expert judgment for classification	False
<b>heptane (142-82-5)</b>	
Animal studies and expert judgment for classification	False
<b>methylcyclohexane (108-87-2)</b>	
Animal studies and expert judgment for classification	False
<b>octane (111-65-9)</b>	
Animal studies and expert judgment for classification	False
<b>toluene (108-88-3)</b>	
Animal studies and expert judgment for classification	False
<b>xylylene (1330-20-7)</b>	
Animal studies and expert judgment for classification	False

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

<b>nonane (111-84-2)</b>	
EC50 - Crustacea [1]	0.2 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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<b>nonane (111-84-2)</b>	
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>heptane (142-82-5)</b>	
EC50 72h - Algae [1]	4.338 mg/l (Pseudokirchneriella subcapitata, Fresh water, QSAR, Biomass)
BCF - Other aquatic organisms [1]	552 (BCFBAF v3.00, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4.5 (Literature)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.38 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
<b>octane (111-65-9)</b>	
EC50 - Crustacea [1]	0.3 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

### 12.2. Persistence and degradability

<b>Miraplate liquid</b>	
Persistence and degradability	No additional information available
<b>heptane (142-82-5)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.92 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.06 g O <sub>2</sub> /g substance
ThOD	3.52 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>Miraplate liquid</b>	
Bioaccumulative potential	No additional information available
<b>heptane (142-82-5)</b>	
BCF - Other aquatic organisms [1]	552 (BCFBAF v3.00, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4.5 (Literature)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.38 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

### 12.4. Mobility in soil

<b>Miraplate liquid</b>	
Mobility in soil	No additional information available
<b>heptane (142-82-5)</b>	
Surface tension	19.66 mN/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	4.5 (Literature)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.38 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

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### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : No additional information available




## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
<b>14.1. UN number</b>		
3295	3295	3295
<b>14.2. Proper Shipping Name</b>		
HYDROCARBONS, LIQUID, N.O.S.	HYDROCARBONS, LIQUID, N.O.S.	Hydrocarbons, liquid, n.o.s.
<b>14.3. Transport hazard class(es)</b>		
3	3	3
		
<b>14.4. Packing group</b>		
III	III	III
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

### 14.6. Special precautions for user

#### SANS

Special provisions (SANS) : 223  
Limited quantities (SANS) : 5 L  
Limited quantities (SANS) : 5 L  
Packagings, large packagings and IBCs Packing instructions (SANS) : P001, IBC03, LP01  
Portable tank and bulk containers instructions (SANS) : T4  
Portable tank and bulk container special provisions (SANS) : TP1, TP29

#### IMDG

Special provisions (IMDG) : 223  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1, TP29  
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS  
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

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Stowage category (IMDG) : A  
Properties and observations (IMDG) : Immiscible with water.

### IATA

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y344  
PCA limited quantity max net quantity (IATA) : 10L  
PCA packing instructions (IATA) : 355  
PCA max net quantity (IATA) : 60L  
CAO packing instructions (IATA) : 366  
CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3, A224  
ERG code (IATA) : 3L

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

## SECTION 16: Other information

Issue date : 06/05/2024  
Revision date : 06/05/2026

Full text of H-statements	
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H227	Combustible liquid
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), South Africa

# Miraplate liquid

## Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

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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.