

SECTION 1: Identification of the substance/mixture and of the supplier/undertaking

1.1. GHS product identifier

| | |
|-----------------|---|
| Product form | : Mixture |
| Trade name | : Prolong - Roadmarking Water-based - Red |
| Type of product | : Water-based coating |
| Product code | : RMREDWB |
| Product group | : Trade product |

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

| | |
|-----------------------------------|--|
| Recommended uses and restrictions | : Suitable for marking lines on concrete and bituminous roads, pathways, parking areas and kerbs |
|-----------------------------------|--|

1.4. Supplier's details

Manufacturer

Dura Paints (Pty) Ltd.
5 Wakefield Road; Founders View South.
P.O. Box 303
1610 Edenvale; Johannesburg – South Africa
T 011 452 5221
Contact: Lizel Rosemann

1.5. Emergency phone number

| | |
|------------------|-------------------------------|
| Emergency number | : 079 494 2731 / 011 452 5221 |
|------------------|-------------------------------|

SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Specific target organ toxicity – Repeated exposure, Category 2 H373

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : May cause damage to organs through prolonged or repeated exposure.

2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :



| | |
|-----------------------------------|--|
| Signal word (GHS-ZA) | : Warning |
| Hazardous ingredients | : Diiron trioxide |
| Hazard statements (GHS ZA) | : H373 - May cause damage to organs (lung/respiratory system) through prolonged or repeated exposure (Inhalation) |
| Precautionary statements (GHS ZA) | : P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read carefully and follow all instructions. P260 - Do not breathe dusts or mists. P319 - Get medical help if you feel unwell. P501 - Dispose of container to recycling. |

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2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to the United Nations GHS |
|-----------------|--------------------|---------|---|
| Diiron trioxide | CAS-No.: 1309-37-1 | 2.8 – 4 | Acute Tox. Not classified (Oral) STOT RE 2, H373 |
| Ethanol | CAS-No.: 64-17-5 | 0.9 – 3 | Flam. Liq. 2, H225 |

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Get medical advice/attention if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| 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/effect, acute and delayed

No additional information available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

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

5.3. Special protective actions for fire-fighters

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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. 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".

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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
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. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures : 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

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Diiron trioxide (1309-37-1) | |
|--|---|
| South Africa - Occupational Exposure Limits (Restricted Limits) | |
| Local name | Iron oxide fume |
| RHCA - STEL/C | 10 mg/m ³ (R: respirable fraction) [as Fe] |
| Regulatory reference | Government Notice No. R. 280, 2021 |
| South Africa - Occupational Exposure Limits (Airborne Pollutants) | |
| Local name | Iron oxide |
| OEL TWA | 5 mg/m ³ dust and fume [as Fe] |
| OEL STEL | 10 mg/m ³ dust and fume [as Fe] |
| Regulatory reference | Government Notice No. R 904 |
| Ethanol (64-17-5) | |
| South Africa - Occupational Exposure Limits (Restricted Limits) | |
| Local name | Ethanol [ethyl alcohol] |
| OEL eight hour TWA [ppm] | 2000 ppm |
| Regulatory reference | Government Notice No. R. 280, 2021 |
| South Africa - Occupational Exposure Limits (Airborne Pollutants) | |
| Local name | Ethanol (Ethyl alcohol) |
| OEL TWA | 1900 mg/m ³ |
| OEL TWA [ppm] | 1000 ppm |
| Regulatory reference | Government Notice No. R 904 |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

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8.3. Individual protection measures, such as personal protective equipment

| | |
|--------------------------|--|
| Hand protection | : Protective gloves |
| Eye protection | : Safety glasses |
| Skin and body protection | : Wear suitable protective clothing |
| Respiratory protection | : In case of insufficient ventilation, wear suitable respiratory equipment |

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. Basic physical and chemical properties

| | |
|---|----------------------|
| Physical state | : Liquid |
| Appearance | : No data available |
| Colour | : Red. |
| Odour | : Slight odour. |
| Odour threshold | : No data available |
| pH | : > 9.9 – < 10.4 |
| 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 | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability | : Non flammable. |
| Vapour pressure | : No data available |
| Vapour pressure at 50°C | : No data available |
| Relative vapour density at 20°C | : No data available |
| Relative density | : > 1.49 – < 1.54 |
| 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 | : > 1100 – < 1300 cP |
| 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 |
| Physical state | : Liquid |
| Appearance | : No data available |

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

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SECTION 10: Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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

None under recommended storage and handling conditions (see section 7).

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

| Diiron trioxide (1309-37-1) | |
|--|--|
| LD50 oral | > 5000 mg/kg bodyweight Animal: , Guideline: EU Method B.1 (Acute Toxicity (Oral)) |
| Ethanol (64-17-5) | |
| LD50 oral rat | 15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560 |
| LD50 oral | 8300 mg/kg bodyweight Animal: mouse, Remarks on results: other: |
| Skin corrosion/irritation | : Not classified pH: > 9.9 – < 10.4 |
| Serious eye damage/irritation | : Not classified pH: > 9.9 – < 10.4 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : May cause damage to organs (lung/respiratory system) through prolonged or repeated exposure (Inhalation). |
| Diiron trioxide (1309-37-1) | |
| LOAEC (inhalation, rat,dust/mist/fume, 90 days) | 0.2102 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study) |
| NOAEC (inhalation, rat, dust/mist/fume, 90 days) | ≥ 0.03 mg/l air Animal: rat, Animal sex: male |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

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| Ethanol (64-17-5) | |
|--|--|
| NOAEL (subchronic, oral, animal/male, 90 days) | < 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |
| NOAEL (subchronic, oral, animal/female, 90 days) | > 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |

Aspiration hazard : Not classified

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

| Diiron trioxide (1309-37-1) | |
|------------------------------------|---|
| EC50 - Crustacea [1] | > 100 mg/l Test organisms (species): Daphnia magna |
| EC50 - Other aquatic organisms [1] | > 100 mg/l Test organisms (species): |
| EC50 72h - Algae [1] | > 20 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |

| Ethanol (64-17-5) | |
|----------------------|--|
| LC50 - Fish [1] | 14.2 g/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 10 g/l Source: ECHA |
| EC50 72h - Algae [1] | ≈ 275 mg/l Source: ECHA |
| NOEC (chronic) | 9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d' |
| NOEC chronic fish | 250-1000 mg/l - 5 days - Source: ECHA |
| NOEC chronic algae | ≈ 280 mg/l Source: ECHA |

12.2. Persistence and degradability

| Prolong - Roadmarking Water-based - Red | |
|---|-------------------------------------|
| Persistence and degradability | No additional information available |

12.3. Bioaccumulative potential

| Prolong - Roadmarking Water-based - Red | |
|---|-------------------------------------|
| Bioaccumulative potential | No additional information available |

12.4. Mobility in soil

| Prolong - Roadmarking Water-based - Red | |
|---|-------------------------------------|
| Mobility in soil | No additional information available |

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

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SECTION 13: Disposal Considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

| SANS | IMDG | IATA |
|---|---|------------------------------------|
| 14.1. UN number | | |
| Not regulated for transport | | |
| 14.2. UN Proper Shipping Name | | |
| Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | |
| Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable |
| 14.4. Packing group, if applicable | | |
| Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | |
| 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

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 01/02/2023

Full text of H-statements:

| | |
|------|------------------------------------|
| H225 | Highly flammable liquid and vapour |
| H226 | Flammable liquid and vapour |

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| Full text of H-statements: | |
|----------------------------|---|
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H303 | May be harmful if swallowed |
| H311 | Toxic in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H331 | Toxic if inhaled |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H341 | Suspected of causing genetic defects |
| H350 | May cause cancer |
| H361 | Suspected of damaging fertility or the unborn child |
| 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 (HCA)

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.