Dura - Hydro Direct to Metal - Blue

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 10
Issue date: 7/29/2025 Version: 1.0

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

1.1. GHS product identifier

Product form	:	Mixture
Trade name	:	Dura - Hydro Direct to Metal - Blue
Type of product	:	Coatings
Product code	:	HYDRODTMBL
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 use	:	Water-based coating for light industrial applications

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

Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Repeated exposure, Category 2	H373

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects	:	Suspected of causing cancer,May cause damage to organs through prolonged or repeated exposure,May cause an allergic skin reaction.

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	:	2-(2-butoxyethoxy)ethanol; Benzothiazole-2-thiol; Diiron trioxide; Titanium dioxide
Hazard statements (GHS ZA)	:	H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer (Inhalation) H373 - May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure (Oral, 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.

P261 - Avoid breathing dust, mist, spray.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P501 - Dispose of container to Recycling, according to local regulations.

P-statements for label (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.; P261 - Avoid breathing dust, mist, spray.; P280 - Wear eye protection, protective clothing, protective gloves.; P302+P352 - IF ON SKIN: Wash with plenty of soap and water; P333+P313 - If skin irritation or rash occurs: Get medical advice/attention; P501 - Dispose of container to Recycling, according to local regulations.

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
2-(2-butoxyethoxy)ethanol	CAS-No.: 112-34-5	2.5245 – 7.524	Flam. Liq. Not classified Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Chronic Not classified
Diiron trioxide	CAS-No.: 1309-37-1	< 1.125	Acute Tox. Not classified (Oral) Acute Tox. Not classified (Inhalation:dust,mist) Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Chronic 2, H411
Titanium dioxide	CAS-No.: 13463-67-7	0.25 – 0.9	Acute Tox. Not classified (Oral) Acute Tox. Not classified (Inhalation:dust,mist) Carc. 2, H351 Aquatic Chronic Not classified
Benzothiazole-2-thiol	CAS-No.: 149-30-4	0.02125 – 0.21375	Acute Tox. Not classified (Dermal) Skin Sens. 1, H317 STOT RE Not classified Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of necessary 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 : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
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.
Self protection of the first-aider : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

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.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
Hygiene measures	:	Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	:	Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store locked up.
Packaging materials	:	Store always product in container of same material as original container.

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/m³ (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/m³ dust and fume [as Fe]
OEL STEL	10 mg/m³ dust and fume [as Fe]
Regulatory reference	Government Notice No. R 904

Titanium dioxide (13463-67-7)	
South Africa - Occupational Exposure Limits (Restricted Limits)	
Local name	Titanium dioxide
RHCA - STEL/C	10 mg/m³ 10 mg/m³ total inhalable dust 5 mg/m³ respirable dust
Remark	CARC (denotes carcinogenicity, which is based on GHS categorisation, including category 1A, 1B)
Regulatory reference	Government Notice No. R. 280, 2021 Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Titanium dioxide
OEL TWA	10 mg/m³ inhalable particulate 5 mg/m³ respirable particulate
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.

8.3. Individual protection measures, such as personal protective equipment

Materials for protective clothing :
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	:	Viscous liquid.
Colour	:	Blue
Odour	:	slight
Odour threshold	:	No data available
pH	:	No data available
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	:	≈ 1.03
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	:	> 300 – < 440 cP Source: Product TDS
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	:	Viscous liquid.

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

No additional information available

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

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	≥ 2410 mg/kg bodyweight Source: ECHA
LD50 dermal rabbit	≈ 2764 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 2090 - 3645

Benzothiazole-2-thiol (149-30-4)	
LD50 oral rat	3800 mg/kg bodyweight Animal: rat, 95% CL: 3530 - 4100
LD50 dermal rabbit	> 7940 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	> 1270 mg/l air Animal: rat

Diiron trioxide (1309-37-1)	
LD50 oral	> 5000 mg/kg bodyweight Animal: , Guideline: EU Method B.1 (Acute Toxicity (Oral))
LC50 Inhalation - Rat	> 5 mg/l Source: ECHA

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 2000 – < 25000 mg/kg bodyweight Practically nontoxic; Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	> 3.43 – < 6.82 mg/l/4h Source: ECHA

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer (Inhalation).

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure (Oral, Inhalation).

2-(2-butoxyethoxy)ethanol (112-34-5)	
NOAEL (oral, rat, 28 days)	≥ 250 mg/kg bodyweight/day Source: ECHA
NOAEL (dermal, rat/rabbit, 28 days)	≥ 200 mg/kg bodyweight/day rat; Source: ECHA
NOAEC (inhalation, rat, gas, 28 days)	≥ 94 mg/l rat; Source: ECHA
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	< 200 mg/kg bodyweight Animal: rat, Guideline: other:, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Benzothiazole-2-thiol (149-30-4)	
LOAEL (oral, rat, 90 days)	≈ 750 mg/kg bodyweight/day Source: ECHA
NOAEL (oral, rat, 28 days)	≈ 375 mg/kg bodyweight/day Source: ECHA

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)
NOAEL (oral, rat, 28 days)	> 1000 mg/kg bodyweight/day Source: ECHA
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 (respiratory system) through prolonged or repeated exposure (Inhalation).

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

2-(2-butoxyethoxy)ethanol (112-34-5)	
LC50 - Fish [1]	≈ 1300 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	≥ 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC chronic crustacea	≈ 100 mg/l Source: ECHA
NOEC chronic algae	≥ 100 mg/l 4 day; Source: ECHA

Benzothiazole-2-thiol (149-30-4)	
LC50 - Fish [1]	0.73 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	8.5 mg/l Test organisms (species): Daphnia magna

Benzothiazole-2-thiol (149-30-4)	
EC50 - Crustacea [2]	16.1 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC (chronic)	0.08 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.041 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '89 d'
NOEC chronic algae	≈ 0.06 mg/l Source: ECHA

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)
NOEC chronic fish	≈ 20 mg/l Source: ECHA
NOEC chronic algae	≈ 20 mg/l Source: ECHA

Titanium dioxide (13463-67-7)	
EC50 - Crustacea [1]	> 2.41 – < 103.9 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	> 100 mg/l Test organisms (species):
EC50 72h - Algae [1]	≥ 100 mg/l Source: ECHA
LOEC (acute)	≈ 160 mg/l Fish, 4 Days; Source: ECHA
LOEC (chronic)	≈ 5 mg/l Crustacea, 21 Days; Source: ECHA
NOEC (acute)	0.004 – 0.08 mg/l 28 Dday, fish; Source: Echa
NOEC (chronic)	≥ 100 mg/l 28 days; Source: ECHA
NOEC chronic fish	> 80 – < 160 mg/l 6 days; Source: ECHA

12.2. Persistence and degradability

Dura - Hydro Direct to Metal - Blue	
Persistence and degradability	Not rapidly degradable

2-(2-butoxyethoxy)ethanol (112-34-5)	
Persistence and degradability	

Benzothiazole-2-thiol (149-30-4)	
Persistence and degradability	

Diiron trioxide (1309-37-1)	
Persistence and degradability	

Titanium dioxide (13463-67-7)	
Persistence and degradability	

12.3. Bioaccumulative potential

Dura - Hydro Direct to Metal - Blue	
Bioaccumulative potential	No additional information available

2-(2-butoxyethoxy)ethanol (112-34-5)	
Partition coefficient n-octanol/water (Log Pow)	≈ 1 @ 20 °C and pH7; Source: ECHA

2-(2-butoxyethoxy)ethanol (112-34-5)	
Partition coefficient n-octanol/water (Log Kow)	≈ 1 @ 20 °C and pH7; Source: ECHA

Benzothiazole-2-thiol (149-30-4)	
Partition coefficient n-octanol/water (Log Kow)	> 2.42 – < 2.86 @ pH 7; Source: ECHA

12.4. Mobility in soil

Dura - Hydro Direct to Metal - Blue	
Mobility in soil	No additional information available

12.5. Other adverse effects

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

SECTION 13: Disposal Considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with SANS / UN RTDG / IMDG / IATA

SANS	UN RTDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. UN Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
Transport document description			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group, if applicable			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No	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

UN RTDG
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. National regulations

15.1.1. OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

Prohibited Hazardous Chemical Agents
Not regulated

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

No additional information available

SECTION 16: Other information

Issue date : 29/07/2025

Full text of H-statements:	
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing 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
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.