SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878

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

1.1 Product identifier

- Product Name: DURAM NS4 ANTI-RUST PRIMER
- UFI: Not available
- Product Part Number: 44

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

- Use of the substance/mixture: A rust-preventing metal primer suitable for domestic, industrial and automotive uses.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: DURAM (PTY) LTD
- Address of Supplier: 13 Alternator Avenue
  Montague Gardens
  Cape Town
  7441
- Telephone: +27 (021) 555-3090
- Email: customercare@duram.co.za; nmakan@duram.co.za

1.4 Emergency telephone number

- Emergency Telephone: +27 (021) 555-3090 (Office hours)
- Poisons Information Helpline 0861 555 777 (After hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Skin Sens. 1, Carc. 2, Aquatic Chronic 2

This product contains titanium dioxide, which is classified as a GHS Carcinogen Category 2. In a liquid coating formulation where the TiO2 particles are bound in a matrix, it has no meaningful potential for human exposure to unbound particles when the product is applied. As a general precaution, care should always be taken to avoid inhalation of mist/dust during spray application/sanding as it may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (Section 8).

2.2 Label elements

GHS08

GHS09

GHS07

SECTION 2: Hazards identification (....)

- Signal Word: Warning

2.2.1 Hazard statements

H351 - Suspected of causing cancer.
H317 - May cause an allergic skin reaction.
H411 - Toxic to aquatic life with long lasting effects.

2.2.2 Precautionary statements

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P203 - Obtain, read and follow all safety instructions before use.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/containers in accordance with local regulation.

2.3 Other hazards

- No hazard expected under normal conditions of use

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

3.2.1 titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

CAS Number:	13463-67-7
EC Number:	236-675-5
Concentration:	5.0-10.0%
Specific Concentration Limits:	Not available
M factor:	Not available
Acute toxicity estimate:	Not available
Categories:	Carc. 2
Symbols:	GHS08
H Statements:	H351
REACH Registration Number:	01-2119489379-17

3.2.2 trizinc bis(orthophosphate)

SECTION 3: Composition/information on ingredients (....)

CAS Number:	7779-90-0
EC Number:	231-944-3
Concentration:	2.0-5.0%
Specific Concentration Limits:	Not available
M factor:	Not available
Acute toxicity estimate:	Not available
Categories:	Aquatic Acute 1, Aquatic Chronic 1
Symbols:	GHS09
H Statements:	H400;H410

3.2.3 Solvent naphtha (petroleum), heavy arom.

CAS Number:	64742-94-5
EC Number:	265-198-5
Concentration:	<2.0%
Specific Concentration Limits:	Not available
M factor:	Not available
Acute toxicity estimate:	Not available
Categories:	Asp. Tox. 1
Symbols:	GHS08
H Statements:	H304

Any concentrations shown as a range is to protect confidentiality and/or is due to batch variation.There are no additional ingredients present which, within the current knowledge of the supplier and in the concentration applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- IF exposed or concerned: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin irritation or rash occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Wash contaminated clothing before reuse.

4.2 Most important symptoms and effects, both acute and delayed

- Suspected of causing cancer by inhalation
- Avoid breathing dust/fume/gas/mist/vapours/spray.

4.3 Indication of any immediate medical attention and special treatment needed

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Get medical advice/attention if you feel unwell.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- Get immediate medical advice/attention.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- In case of fire use foam, carbon dioxide or dry agent
- Fog to cool and control
- Do not use water jets

5.2 Special hazards arising from the substance or mixture

- Contain spillage by any means possible
- In case of fire: hazardous combustion gases may be formed such as carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx).

5.3 Advice for firefighters

- Wear protective equipment and respirators.
- Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Keep people and animals away
- Wear protective clothing/equipment.

6.2 Environmental precautions

- Contain spillage by any means possible
- Do not allow to enter public sewers and watercourses
- MAJOR SPILLAGE: Contain and collect spilt product using a suitable adsorbent material such as vermiculite. Shovel material into a clean, dry, labelled container and close lid. Consult your local waste authority for advice on disposal.
- MINOR SPILLAGE: Mop up spill. Wash residues away with water and detergent.

6.3 Methods and material for containment and cleaning up

- Ensure adequate ventilation
- Absorb spillage in inert material and shovel up
- Remove contaminated material to safe location for subsequent disposal

6.4 Reference to other sections

- See section 7 for information on safe handling.
- See section 8 for information on personal protection equipment.
- See section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Wash contaminated clothing before reuse.
- Dispose of contents/container to an authorised waste collection point

7.2 Conditions for safe storage, including any incompatibilities

- Store locked up.
- Keep container tightly closed, in a cool, well ventilated place
- Store separately from any reactive substances, especially oxidisers.

SECTION 7: Handling and storage (....)

7.3 Specific end use(s)

- Follow the Manufacturer's recommended uses and procedures for this product.
- Opened containers should be carefully resealed and stored in an upright position

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 trizinc bis(orthophosphate)

DNEL (Industry; inhalational, long term systemic effects): 5 mg/m³
DNEL (Industry; dermal, long term systemic effects): 83 mg/kg bw/day
DNEL (Consumer; inhalational, long term systemic effects): 2.5 mg/m³
DNEL (Consumer; dermal, long term systemic effects): 83 mg/kg bw/day
DNEL (Consumer; oral, long term systemic effects): 0.83 mg/kg bw/day

8.1.2 titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

TWA OEL-RL: 10.5 mg/m³
- total inhalable dust, respirable dust
DNEL (Industry; inhalational, long term local effects): 10 mg/m³
DNEL (Consumer; oral, long term systemic effects): 700 mg/kg bw/day

8.2 Exposure controls

Boots **Gloves** **Goggles**

- Wear suitable protective clothing, eye/face protection
- The selection of personal protective equipment depends on marks of quality, which may vary from manufacturer to manufacturer.
- The resistance of the glove has to be checked prior to application. For penetration of the glove material, observe the breakthrough time supplied by the manufacturer.
- In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state: liquid
- Colour: various
- Odour: Characteristic odour
- Melting point/Range: not applicable
- Flashpoint: non-combustable
- Boiling Point/Range: >100°C
- Flammability: not flammable
- pH: 8.5 - 9.5
- Solubility in water: miscible with water

SECTION 9: Physical and chemical properties (....)

- Density: 1.29±0.02 g/cm³ at 20 °C
- Viscosity: 95 - 100 KU

9.2 Other information

- Please see Technical Data Sheet (TDS) for further information

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable under normal conditions of use.

10.2 Chemical stability

- Not reactive.
- Stable if stored under normal conditions

10.3 Possibility of hazardous reactions

- No dangerous reactions known under conditions of normal use.

10.4 Conditions to avoid

- Avoid contact with alkalis (strong bases)
- Keep in a cool, dry, well ventilated place

10.5 Incompatible materials

- Incompatible with oxidizing substances

10.6 Hazardous decomposition products

- In case of fire and/or explosion do not breathe fumes
- Hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke may be produced.
- No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Acute toxicity

Estimated LD_{50} (oral) (ATE) : >2000 mg/kg
Estimated LD_{50} (dermal) (ATE) : >4000 mg/kg
Estimated LD_{50} (inhalational) (ATE) : >20 mg/l/4hr (gas/vapour)

11.1.1.1 Solvent naphtha (petroleum), heavy arom.

LC_{50} (inhalation, rat): 10-20 mg/l/4h
LD_{50} (oral, rat): >2000 mg/kg
LD_{50} (dermal, rabbit): >2000 mg/kg

11.1.1.2 trizinc bis(orthophosphate)

LC_{50} (inhalation, rat): >5.7 mg/l/4h
LD_{50} (oral, rat): >5000 mg/kg body weight

11.1.1.3 titanium dioxide; [in powder form containing 1 % or more of particles with

SECTION 11: Toxicological information (....)

aerodynamic diameter ≤ 10 µm]

LD_{50} (oral, rat): >5000 mg/kg

11.1.2 Skin corrosion/irritation

No known effects.

11.1.3 Serious eye damage/irritation

No known effects.

11.1.4 Respiratory or skin sensitisation

May cause an allergic skin reaction.

11.1.5 Germ cell mutagenicity

No known effects.

11.1.6 Carcinogenicity

Suspected of causing cancer by inhalation

11.1.7 Reproductive toxicity

No evidence of reproductive effects

11.1.8 STOT (specific target organ toxicity) - single exposure

No known effects.

11.1.9 STOT (specific target organ toxicity) - repeated exposure

No known effects.

11.1.10 Aspiration hazard

No information available but must be considered harmful

11.2 Information on other hazards

- No further or addtional information available.

SECTION 12: Ecological information

12.1 Toxicity

12.1.1 Solvent naphtha (petroleum), heavy arom.

EC_{50} (daphnia): 6 mg/l (48 hr)
LC_{50} (fish): 8.1 mg/l (96 hr)

12.1.2 trizinc bis(orthophosphate)

IC_{50} (algae):	0.136 mg/l (72 hr)
LC_{50} (fish):	0.169 mg/l (96 hr)
PNEC (Fresh water):	20.6 mg/l
PNEC (Marine water):	6.1 µg/l
PNEC (Sediment; fresh water):	117.8 mg/kg dry weight

SECTION 12: Ecological information (....)

PNEC (Sediment; marine water):	56.5 mg/kg dry weight
PNEC (Soil):	35.6 mg/kg dry weight
PNEC (STP):	100 µg/l

12.1.3 titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

EC_{50} (daphnia):	>100 mg/l (48 hr)
LC_{50} (fish):	>100 mg/l (96 hr)
PNEC (Fresh water):	1 mg/l
PNEC (intermittent):	0.61 mg/l
PNEC (Marine water):	0.127 mg/l
PNEC (Sediment; fresh water):	1000 mg/kg dry weight
PNEC (Sediment; marine water):	100 mg/kg dry weight
PNEC (Soil):	100 mg/kg dry weight
PNEC (STP):	100 mg/l

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulative potential

- No information available

12.4 Mobility in soil

- Miscible with water
- Additional ecological information: considered to be harmful to terrestrial vertebrates. May have short-term environmental effects. Contain monitor and remove.
- Contain, monitor and remove.

12.5 Results of PBT and vPvB assessment

- Not available

12.6 Endocrine disrupting properties

- No known effects or hazards.

12.7 Other adverse effects

- Contain spillage by any means possible

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Dispose of contents/container to an authorised waste collection point
- Can be eliminated from sewarage/ effluent by chemical flocculation.

SECTION 14: Transport information

Dangerous Substance

ENVIRONMENTALLY HAZARDOUS

SECTION 14: Transport information (....)

ADR, IMDG, IATA

14.1 UN number or ID number

- UN No.: 3082

14.2 UN proper shipping name

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3 Transport hazard class(es)

- Hazard Class: 9

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Marine Pollutant
- ENVIRONMENTALLY HAZARDOUS

14.6 Special precautions for user

- Contains: trizinc bis(orthophosphate)

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Refer to current ADR Regulations
- Refer to current CLP Regulations
- This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878

15.2 Chemical safety assessment

- A chemical safety assessment (CSA) for this product has not yet been completed

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H304: May be fatal if swallowed and enters airways. H351: Suspected of causing cancer. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.

All information is given in good faith but without guarantee in respect of accuracy.
No responsibility is accepted for errors or omissions or the consequences thereof.

Important Note: The information contained in this SDS is not intended to be exhaustive and believed to be correct at the date of its preparation. It is the user's responsibility to verify that this data sheets is current prior to using the product which is detailed in it. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to its use. Where those purposes are other than as specifically recommended in this safety data sheet, the user then uses the product at their own risk.

Manufacturer's Disclaimer: The conditions, methods and factors effecting the handling, storage, application,

SECTION 16: Other information (....)

use, misuse or disposal of the product are not under the control or knowledge of the Manufacturer. Therefore the Manufacturer does not assume responsibility for any adverse events that may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law the Manufacturer expressively disclaims liability for any and all losses, damages and/or expenses arising out of or in any way is connected to the storage, handling, use or disposal of the product. Safe handling, storage and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.