



**DURAM (PTY) LTD • REG. NO. 9900461/07**  
13 ALTERNATOR AVENUE • MONTAGUE GARDENS • 7441 • CAPE TOWN • R.S.A.  
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## **MATERIAL SAFETY DATASHEET**

### **DURAM NS7 HEAT RESISTANT PAINT**

#### **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

##### **1.1 Product identifier**

Trade name: NS7 HEAT RESISTANT PAINT

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

Application of the substance: metal coating.

##### **1.3 Details of the supplier of the safety data sheet**

Manufacturer/Supplier: Zest Polyurethanes

Alternator Avenue, Montague Gardens, Cape Town, South Africa, 7441, Tel: +27 (021) 555-3090

Further information obtainable from: The Technical Manager, Zest Polyurethanes. Email:

zest@duram.co.za

##### **1.4 Emergency telephone number:** The Technical Manager, Zest Polyurethanes, Tel: +27 (021) 555-3090 (GMT 10:00-18:00)

#### **2. HAZARDS IDENTIFICATION**

##### **2.1 Classification of the substance or mixture – according to Regulation (EC) No 1272/2008 [CLP]**

Flammable Liquids – Category 3

Skin Corrosion - Category 2

Specific Target Organ Toxicity (Single Exposure) ; (Respiratory Tract Irritation) – Category 3

Acute Aquatic Hazard – Category 3

Percentage of the Mixture consisting of ingredient(s) of Unknown Hazards to the Aquatic Environment Less than 5%

##### **2.2 GHS Label elements**

###### **Hazard Pictograms**



**Signal Word: Warning**

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## Hazard Statements:

- H226 Flammable liquid and vapour
- H315 Causes skin irritation
- H373 May cause damage to organs through prolonged or repeated inhalation exposure

### Precautionary Statements: (Prevention):

- P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P284 In case of inadequate ventilation wear respiratory protection

### Precautionary Statements: (Response):

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if

present and easy to do - continue rinsing.

### Precautionary Statements: (Storage):

- P403 + P233 Store in a well ventilated place. Keep container tightly closed.

### Precautionary Statements: (Disposal):

- P501 DDiscard contents/container to landfill site after solidification.

### Labelling of special preparations: (GHS):

Flammable, irritant..

### According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: ALCOHOLS, Xylene (mixed isomers).

## 2.3 Other hazards

### According to Regulation (EC) No 1272/2008 [CLP]



No specific dangers known, if the regulations/notes for storage and handling are considered.

## 3. COMPOSITION / INFORMATION OF INGREDIENTS

### 3.1 Chemical characterisation: Mixtures

Polysiloxane.

Description: Mixture of substances listed below with non-hazardous additions

Hazardous ingredients (GHS) according to Regulation (EC) No 1272/2008 [CLP]			
CAS: 1330-20-7 EINECS: 215-535-7	XYLENE (mixed isomers)	 H226 H312 + H332	25 – 35% by mass
CAS: 64-17-2	ETHYL ALCOHOL	 H226, H319, H335	2 – 3 % by mass

act: Use hand cleaner/soap and water. Remove contaminated clothing. If skin irritation continues, consult a doctor. After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. After inhalation: Move to fresh air. In case of any discomfort, seek medical attention immediately.

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

Inhalation sensitiser with accumulative effects. Risk of dermatitis. May cause lung damage if swallowed.

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

If ingested, do not induce vomiting. Seek immediate medical attention.

### 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing agents: Foam. Carbon dioxide. Dry powder. Fog to cool and control.

Unsuitable extinguishing agents, for safety reasons: Do NOT use water jets. Containers can become pressurised if contents are contaminated with water.

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

Flammable with toxic fumes.

#### 5.3 Advice for firefighters

Wear protective equipment and respirators. Blown or distorted containers should be handled with extreme caution.

### 6. ACCIDENTAL RELEASE MEASURES

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

Wear protective equipment. Keep unprotected persons away.

#### 6.2 Environmental precautions

Do not allow to enter drains or sewers / surface or ground water.

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

Ensure adequate ventilation. Hazardous in liquid state. Solidify by reaction with water before 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.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Information about protection against fire and explosion: Flammable. No open flames. No smoking.

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

Requirements to be met by storerooms and receptacles: Store separately from any reactive substances, especially oxidisers.

Information about storage in one common facility: As above.

Further information about storage conditions: Keep containers tightly sealed.

#### 7.3 Specific end use(s)

Open with care. Cover lid / bung with a cloth while releasing pressure.

Generates carbon dioxide gas from reaction with water. Do not seal if contaminated with water due to danger of bursting.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: Adequate ventilation. See items 7.1 and 7.2.

#### 8.1 Control parameters

Ingredients with limit values that require monitoring in the workplace: Monitoring is not required.

The product has no quantities of materials with critical values.

Additional information:

Component:	IOELV TWA (8 hours):		IOELV STEL (15 minutes):	
Xylene (1330-20-7)	50 ppm	221 mg/m <sup>3</sup>	100 ppm	442 mg/m <sup>3</sup>
Ethanol (64-17-2)	---	1880 mg/m <sup>3</sup>	---	---

#### 8.2 Exposure controls

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General protective and hygiene measures: Wash hands before breaks and at the end of work. Do not inhale gases/fumes.

Personal protective equipment:



Respiratory protection:

A cartridge-type respirator with cartridge for organic fumes is essential for spraying operations.



Eye protection:

Wear tightly sealed goggles or face shield.



Hand protection:

Wear nitrile rubber gloves.

Material of gloves: The selection of suitable gloves also depends on marks of quality, which vary from manufacturer to manufacturer. The resistance of the glove material cannot be calculated in advance and therefore has to be checked prior to the time of application.

Penetration of glove material: Observe the exact breakthrough time supplied by the manufacturer.

Skin protection: Wear overalls and safety boots.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General information

#### Appearance:

Physical state	Liquid
Colour	Black, silver
Odour	Aromatic
Odour threshold	Not determined
pH value:	8.0

#### Change in condition:

Melting point/Melting range	< -46 °C
Boiling point/Boiling range	140 °C
Flash point	27 °C (ASTM D56)
Flammability (solid, gaseous)	Flammable
Ignition temperature	> 200 °C
Decomposition temperature	200 °C
Self-igniting	Product is not self-igniting.
Danger of explosion	Explosion of mixtures with oxygen possible. Produces carbon dioxide gas when mixed with water. Subsequent sealing of drums can lead to pressure burst.

#### Explosion limits:

Upper	2.1 % by volume
Lower	11.5 % by volume
Vapour pressure at 20 °C	14.2 hPa
Density at 20 °C	1.180 g/cm <sup>3</sup>
Relative density	1.180 (water = 1.00)
Vapour density	Not determined

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Evaporation rate	Not determined
Solubility in / Miscibility with water	Not miscible, reacts with water
Segregation coefficient (n-octanol/water)	Not determined

**Viscosity:**

Dynamic at 20 °C	65 – 70ku
Kinematic	Not determined

**Solvent content:**

Organic solvents	<32 % by mass
Water	< 0.1 % by mass
Solids content	> 68 % by mass or 55 % by volume

**9.2 Other information**

No further relevant information available.

VOC (EU)	≤ 380g/L
VOCV	≤ 45% by volume

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Not reactive.

**10.2 Chemical stability**

Thermal decomposition / conditions to be avoided: Could produce static discharge – use earthing.

**10.3 Possibility of hazardous reactions**

Stable if stored under normal conditions.

**10.4 Conditions to avoid**

When exposed to abnormally high temperatures containers will bulge and possibly burst.

**10.5 Incompatible materials**

Oxidisers. Reacts with water, generating carbon dioxide gas.

**10.6 Hazardous decomposition products**

Hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke may be produced.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Acute toxicity: LD<sub>50</sub> / LC<sub>50</sub> values relevant for classification:

XYLENE:		ETHANOL:	
Oral (LD <sub>50</sub> )	4300 mg/kg (rat)	Oral (LD <sub>50</sub> )	790mg/kg (rat)
Dermal (LD <sub>50</sub> )	> 1700 mg/kg (rabbit)	Dermal (LD <sub>50</sub> )	2520 mg/kg (rabbit)
Inhalation (LC <sub>50</sub> )	27.6 mg/l / 4 hours (rat)	Inhalation (LC <sub>50</sub> )	8000 mg/l / 4 hours (rat)

No carcinogenic, mutagenic, or genetic effects have been established.

Primary irritant effect: Skin and Inhalation irritant.

**XYLENE**

On the skin	Practically non-irritating.
On the eyes	Irritant.
Orally	Low toxicity.

Through inhalation giddiness.	Harmful.Can irritate the respiratory tract and cause headaches and
possible irritation and disturbances.	Sensitisation: Prolonged skin contact may defat the skin resulting in dermatitis. Prolonged inhalation may cause CNS
<b>ETHANOL</b>	
On the skin	Slight to moderate irritation.
On the eyes	Moderate eye irritation.
Orally	Low toxicity.
Through inhalation	Can cause narcotic effect, patient may appear drunken.
Sensitisation	Not documented.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Aquatic toxicity: None of the components is persistent in the aquatic environment.

### 12.2 Persistence and degradability

Biodegradable.Once solidified, can be disposed of in landfill sites (consult local regulations).

### 12.3 Bioaccumulative potential

Not bioaccumulative.

### 12.4 Mobility in soil

Low.Evaporates.

Additional ecological information:

General notes: Considered harmful to terrestrial vertebrates. May have short-term environmental effects. Contain, monitor and remove.

### 12.5 Results of PBT and vPvB assessment

Not applicable.

### 12.6 Other adverse effects

No further relevant information available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Recommendation: Hazardous in liquid state. Solidify by reaction with water before disposal. Danger of bursting – do not seal.

Use reputable waste disposal contractors. Destroy used containers. Consult local official regulations.

European waste catalogue	
08 00 00	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks.
08 01 00	Wastes from MFSU and removal of paint and varnish.
08 01 11	Waste paint and varnish containing organic solvents or other dangerous substances.

### Uncleaned packaging

Recommendation: Leave container unsealed for 3 to 4 days for evaporation to occur. Once liquids are no longer present, container may be disposed of in a landfill site. Disposal must be made according to official regulations.

## 14. TRANSPORT INFORMATION

### 14.1 UN-Number



ADR, IMDG, IATA

UN 1263

## 14.2 UN proper shipping name

ADR 1263 PAINT  
IMDG, IATA PAINT

## 14.3 Transport hazard classes

ADR		IMDG, IATA	
			
Class	3 Flammable liquids	Class	3 Flammable liquids
Label	3	Label	3

IMO class: 3  
EA code: 127  
HAZCHEM code: 3 (Y)

## 14.4 Packing group

ADR, IMDG, IATA III

## 14.5 Environmental hazards

Marine pollutant: ND (Not Dangerous)

## 14.6 Special precautions for user

Warning: Flammable liquids  
Danger code (Kemler): 33  
EMS Number: F-E-S-E

## 14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC Code Not applicable

Transport/Additional information: For ADR and IMDG: Transport and packing are in accordance with the regulation for limited quantities.  
This product is therefore non-dangerous goods.

## ADR

Limited quantities (LQ) 1 L and 4 L  
Transport category 3

## 15. REGULATORY INFORMATION

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

Compliant with REACH, CLP and GHS

### 15.2 Chemical safety assessment

Chemical Safety Assessment not yet performed due to registration timelines. Exposure scenarios for the mixture cannot be provided at the moment because exposure scenarios are not yet available for all relevant substances due to registration timelines. For advice on essential measures see sections 7 and 8 of this safety data sheet.

## 16. OTHER INFORMATION

**PAY SPECIAL ATTENTION TO STORAGE AND HANDLING REQUIREMENTS.**

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IN CASE OF ANY DISCOMFORT FROM CONTACT WITH THE MIXTURE, ALWAYS SEEK MEDICAL ADVICE.

- H226 Flammable liquid and vapour
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H312 + H332 Harmful in contact with skin or inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation

### **Notice to Reader**

Important Note: The information contained in this Data Sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and is believed to be correct at the date of its preparation. It is the user's responsibility to verify that this data sheet is current prior to using the product in 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

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