



PRINT DATE 1/07/07

Version 1.0
REVISION DATE: 1/07/07

MATERIAL SAFETY DATA SHEET

MSDS 381

PAGE 1 OF 6

1. Product and Company Identification

- 1.1 PRODUCT NAME:** DUO PRIMER
- 1.2 USE OF PRODUCT** Bituminous primer for substrates prior to torch-on application.
- 1.3 SUPPLIER:** Equus Industries Ltd
Sheffield Street
Riverlands Industrial Estate
Blenheim, Marlborough, New Zealand
Telephone: +64 3 578 0214
Fax: +64 3 578 0919
- 1.4 EMERGENCY CONTACT:** **National Poison Centre**
Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 578 0214 8:00am – 6:00pm Mon - Fri

2. Hazards Identification

- 2.1 Classification:**
Dangerous Goods – classification according to New Zealand Dangerous Goods Code.
- 2.2 Risk & Safety Phrases:**
R10,20-21,36-37-38,51-53,65,66,67
S23,24,43,57,60,62

The full text of each R & S phrases are listed in Section 16.

3. Composition/Information on Ingredients

- 3.1 Chemical Characterization (Preparation):**
Mixture of bitumen and solvent.
- 3.2 Hazardous Ingredients:**

CAS NO.	COMPONENT	CONCENTRATION %	CLASSIFICATION
64742-82-1	Nafta (petroleum)	<50%	R10/51/53/65/66/67
64742-95-6	Solvent naphtha (petroleum)	<50%	R10/20-21/36-37-



	Light aromatic		38/51-53/65
--	----------------	--	-------------

- 3.3** Only ingredients, additives and impurities which are classified and contribute to the classification of the product are included in this section.

4. First Aid Measures

- 4.1 After Inhalation:**
Remove person to fresh air. Allow person to rest. Seek medical attention if symptoms develop.
- 4.2 After Skin Contact:**
Remove contaminated clothing. Rinse skin immediately with mild soap and plenty of water.
- 4.3 After Eye Contact:**
Rinse immediately, while holding eyelid open for at least 15 minutes. Seek medical attention.
- 4.4 After Ingestion:**
Do not induce vomiting. Seek medical attention immediately.
- 4.5 Advice to Doctor:**
Treat symptomatically.

5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:**
Foam, lightly sprayed water. Dry chemical powder, sand and earth shall only be used in case of small fires.
- 5.2 Protective Equipment:**
Use self contained breathing apparatus when in close proximity to fire, and wear full body protective clothing.
- 5.3 Specific Hazards:**
When burned in big quantities, a complex mixture of organic and non-organic gases.
- 5.4 Combustion Products:**
Carbon monoxide, carbon dioxide, fumes and smoke.
- 5.5 Precautions in Connection with Fire:**
Do not use a heavy water spray.

6. Accidental Release Measures

- 6.1 Preliminary Action and Precautions:**
- 6.1.1** Eliminate every possible source of ignition.
- 6.1.2** Evacuate all personnel immediately and ventilate area.
- 6.1.3** Avoid breathing vapour and contact with skin, eyes and clothing.



6.1.4 Wear recommended personal protective equipment.

6.1.5 Shut off leaks if possible without risk.

6.1.6 Dike in the spilled product as much as possible by means of a sand barrier.

6.1.7 Prevent entry of product into sewers, storm water drains and open bodies of water.

6.1.8 Collect the spillage in closable, suitable disposal containers.

6.1.9 Clean up all spills as soon as possible, using an inert absorbent material (i.e. sand, earth) and dispose of as hazardous waste.

7. Handling and Storage

7.1 Handling:

7.1.1 Always provide adequate ventilation.

7.1.2 Avoid breathing vapour or mist.

7.1.3 Avoid contact with eyes, skin and clothing.

7.1.4 Wear safety shoes when handling the pails.

7.1.5 Wash hands thoroughly after handling, especially before eating, drinking, smoking or using the toilet.

7.1.6 Do not eat or drink whilst using this primer.

7.2 Storage:

7.2.1 Store in a well ventilated, fire proof place.

7.2.2 Store away from sources of ignition, (i.e. sparks, open flames, heat etc.)

7.2.3 Keep containers tightly closed at all times.

8. Exposure Controls and Personal Protection Equipment

8.1 Exposure Limits:

Solvent naphtha (petroleum)	Cas – 64742-95-6	TLV/TWA (ACGIH): 19ppm (100mg/m ³) STEL (ACGIH): 50ppm (250mg/m ³)
Naphtha (petroleum)	Cas – 64742-82-1	TLV/TWA(ACGIH): 61ppm (350mg/m ³)

8.2 Exposure Controls:

8.2.1 Exposure Controls in the Work Place:

Local exhaust and general ventilation must be adequate to meet exposure limit(s).

8.2.2 Personal Protection Equipment

Respiratory Protection – Ventilation, local exhaust. CE-approved organic vapour and



Hand Protection – solvent respirator required.
Use PVC, neoprene or nitrile-rubber gloves.
Eye Protection – Use protective goggles and/or face shield if necessary.

9. Physical and Chemical Properties

9.1 General Information:	
Physical State/Form	Liquid
Colour	Black
Odour	Characteristic
Density	± 0,95 at 20 ⁰ C
Kinematic Viscosity	46 mm ² /s at 40 ⁰ C (during production)
Flash Point	40 ⁰ C (PMCC) (based on the solvent)
Lower Explosion Limit (LEL)	0.6% (V/V) (based on the solvent)
Upper Explosion Limit (UEL)	8% (V/V) (based on the solvent)
Water Solubility/Miscibility	Negligible.
Explosive Properties	Can form an explosive gas cloud during use in closed spaces.

10. Stability and Reaction

- 10.1 General Information:**
This material is stable when properly handled and stored. No hazardous reactions are known.
- 10.2 Conditions to Avoid:**
High temperatures, open flames, sparks.
- 10.3 Material to Avoid:**
Strong oxidizing agents.
- 10.4 Hazardous Decomposition Products:**
None expected when material properly handled and stored. For thermal decomposition see Section 5.

11. Toxicological Information

- 11.1 General Information:**
No specific toxicity data is available for this product.
- 11.2 Acute toxicity:**
Oral LD 50: at expectation >2000 mg/kg
Inhalation LC 50: Not dangerous when inhaled during normal application.
- 11.3 Skin Contact:**
May cause slight irritation.
- 11.4 Eye Contact:**
Fumes may cause slight irritation.
- 11.5 Ingestion:**
Minimal toxicity. After swallowing, some drops of liquid can enter the lungs (aspiration), which may cause pneumonia.



11.6 Inhalation:

Irritating to the respiratory system. Symptoms include headache, dizziness, coughing.

11.7 Chronic effects:

Dermatitis may be caused by prolonged exposure to skin. Respiratory disorders may be aggravated by repeated or prolonged inhalation. Long term exposure to the vapour in closed working space might cause headaches, dizziness, eye irritation, respiratory irritation.

12. Ecological Information

12.1 Environment Protection:

Prevent product from entering drains, sewers and waterways.

12.2 Ecotoxicity:

Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

12.3 Persistence and degradability:

Slow biodegradation.

12.4 Bioaccumulative Potential:

Data not available.

13. Disposal Consideration

13.1 Material

Dispose of according to regulations by incineration in a special waste incinerator or landfill at a permitted facility in accordance with local/national regulations.

14. Transport Information

14.1 Land Transport:

Road: Flammable liquid. (Class: 3 , GP III, HAZ CHEM 2W)

Rail: Flammable liquid. (Class: 3 , GP III, HAZ CHEM 2W)

14.2 Sea Transport: Flammable liquid. (Class:3.2 , GP III, HAZ CHEM 2W) Marine Pollutant.

14.3 Air Transport: Flammable liquid. (Class: 3 , GP III, HAZ CHEM 2W)

14.4 Postal and Courier Service: This product cannot be transported.

15. Regulatory Information

This product is hazardous and flammable.



16. Other Information

16.1 Full Text of R-Phrases Contained in Section 2:

R10	Flammable
R20/21	Harmful by inhalation and in contact with skin.
R36/37/38	Irritating to the eyes, respiratory system and skin
R51/53	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness

16.2 Full Text of S-Phrases Contained in Section 2:

S23	Do not breathe gas/fumes/vapour/spray
S24	Avoid contact with skin
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

16.3 The information contained in this Data Sheet relates only to the specific material identified. Equus Industries Ltd believes the information to be accurate and reliable as at the date of this Data Sheet. No Warranty, Guarantee or representation is expressed or implied by the Company as to the absolute correctness or completeness of any representation contained in this Data and assumes no legal responsibility in connection therewith. It can not be assumed that all acceptable safety measures are contained in this Data Sheet, or that additional measures may not be required under particular or exceptional circumstances or conditions.