

1. Product and Company Identification

- 1.1 PRODUCT NAME:** DURACON 319
- 1.2 USE OF PRODUCT** Topcoat for Duracon flooring system.
- 1.3 SUPPLIER:** Equus Industries Ltd
Sheffield Street
Riverlands Industrial Estate
Blenheim, Marlborough, New Zealand
Telephone: +64 3 578 0214
Fax: +64 3 5780919
- 1.4 PRODUCER:** Alteco Technik GmbH
Raiffeisenstraße 16
D-27239 Twistringen, Germany
Telephone: 0049 (0) 4243-92 95-0
Fax: 0049(0) 4243 3322
Email: info@alteco-technik.de
- 1.5 EMERGENCY CONTACT:** **National Poison Centre**
Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 5780214 8:00am – 6:00pm Mon – Fri

- 1.6 DATE FOR PREPARATION:** 1 May 2014

2. Hazards Identification

2.1 Statement of Hazardous Nature

Classified as hazardous according to New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

- 2.2 HSNO Group Standard:** Additives, Process Chemicals and Raw Materials (Flammable).

- 2.3 HSNO Classification**
3.1B, 6.1D, 6.3A, 6.4A, 6.5B, 6.9A, 9.1D

- 2.4 Most Important Hazards:**
Highly flammable
Irritating to respiratory system
May cause sensitization by skin contact
Harmful to aquatic life

2.5 Prevention Statements

- Read label before use

5. Fire-Fighting Measures

5.1 Suitable extinguishing media:

Water mist, carbon dioxide (CO₂), dry powder, foam.

5.2 Extinguishing media which shall not be used for safety reasons:

High volume water jet.

5.3 Specific hazards:

Hazardous decomposition products formed during combustion. Flash back possible over considerable distance. Explosive reaction may occur on heating or burning. Burning produces irritant fumes.

5.4 Advice for Firefighters

5.4.1 Protective equipment and precautions for firefighters:

In the event of a fire, wear self-contained breathing apparatus. Use personal protective equipment.

5.4.2 Further information:

Keep containers and surroundings cool with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Prevent contaminated extinguishing water from entering drains, sewers and waterways.

5.5 Additional information:

Flashpoint (MMA) = 11.5°C. Hazchem 3YE

6. Accidental Release Measures:

6.1 Personal precautions:

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Avoid contact with skin eyes and clothing.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains and sewers. Do not allow material to contaminate ground water system.

6.3 Methods and materials for containment and for cleaning up:

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Transfer to a container for disposal according to local/ national regulations (see section 13). Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment.

7. Handling and Storage:

7.1 Safe Handling:

7.1.1 Technical Measures/Precautions:

Use only in well ventilated areas. Vapours may form explosive mixtures with the air. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. Do not use sparking tools. Use only explosion-proof equipment. Have fire extinguishers ready before opening drum.

7.1.2 Safe handling advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Provide exhaust ventilation close to floor level. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Open drum carefully as content may be under pressure.

7.2 Safe Storage:

7.2.1 Technical measures/ Storage conditions:

Store in original containers. Never fill containers more than 80% because aerial oxygen is necessary for stabilising. Store between 5 and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep in an area equipped with solvent resistant flooring. Do not store together with oxidizing and self-igniting products.

8. Exposure Controls and Personal Protection Equipment

8.1 Occupational exposure controls:

8.1.1 Engineering measures:

Ensure adequate ventilation, especially in confined areas.

8.1.2 Exposures limits:

Chemical name	CAS No	Regulation	Limit
Methyl Methacrylate	80-62-6	WES/TWA WES/STEL	50ppm 208mg/m ³ 100ppm 416mg/m ³

8.2 Personal protective equipment:

8.2.1 Respiratory protection:

Respirator with filter for organic vapour. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Preferably a compressed airline breathing apparatus.

8.2.2 Hand protection:

Solvent-resistant gloves. Suitable material: Butyl rubber. Take note of the information given by the producer concerning permeability, break through times, and of special workplace conditions (Mechanical strain, duration of contact.) Follow the skin protection plan.

8.2.3 Eye protection:

Tightly fitting safety goggles. Eye wash bottle with pure water.

8.2.4 Skin protection:

Follow the skin protection plan. Flame retardant, antistatic protective clothing. Remove and wash contaminated clothing before re-use.

8.2.5 Hygiene measures:

Handle in accordance with good industrial hygiene and safety practices for chemicals. When using, do not eat, drink or smoke. Keep away from food, drink and animal foodstuffs. Keep working clothes separate.

8.2.6 Environmental exposure controls:

Prevent product from entering drains, sewers and waterways. Do not allow material to contaminate ground water system.

9. Physical and Chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Colour	Violet
Odour	Acrylic-like
Odour Threshold	0.05 ppm

9.1.1 Property	Values	Remarks, Methods
pH	Not Applicable	
Boiling point/boiling range	100.3 °C (MMA)	
Flash point	11.5 °C (MMA)	
Explosion Limits		
Upper	12.5 Vol.% (MMA)	
Lower	2.1 Vol.% (MMA)	
Vapour pressure	38.7 mbar (MMA)	(Air = 1.0)
Vapour density	Not Applicable	
Relative density	Not Applicable	
Water Solubility	insoluble	
Partition coefficient: n-octanol/water	1.38 log POW (MMA)	
Viscosity, kinematic	160 – 200 mPa.s (25 °C)	
Explosive properties	Not Applicable	
Evaporation rate	Not Applicable	

9.2 Other information:

Volatile organic compounds (VOC) content	Not Applicable
Density	0.99 g/cm ³ (25 °C)
Bulk density	Not Applicable
Melting/freezing point	-48 °C (MMA)

10. Stability and Reactivity

10.1 Reactivity:

Stable under normal conditions

10.2 Chemical Stability:

Stable under recommended storage conditions.

10.3 Conditions to avoid:

Heat, flames and sparks. Exposure to sunlight.

10.4 Materials to avoid:

Avoid radical-forming starting agents, peroxides and reactive metals. Amines, Heavy metal compounds, Oxidizing agents, Reducing agents.

10.5 Hazardous decomposition products:

No hazardous decomposition products are known.

10.6 Hazardous polymerization:

Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate heat to cause thermal decomposition and/ or rupture containers.

11. Toxicological Information

11.1 Acute toxicity:

Product Information

Inhalation Irritating to respiratory system. Irritating to mucous membranes.

Eye contact There is no data available for this product.

Skin contact Irritating to skin. May cause sensitization by skin contact.

Ingestion There is no data available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL METHACRYLATE	7872 mg/kg (Rat)	<5000mg/kg (Rabbit)	4632 ppm (Rat)
2-ETHYLHEXYL ACRYLATE	4435 mg/kg (Rat)	7522 mg/kg (Rabbit)	

11.2 Chronic toxicity

Skin corrosion/irritation Irritating to skin

Serious eye damage/eye irritation No information available

Sensitisation May cause sensitization by skin contact

Target organ effects Eyes, Respiratory system. Skin.

Germ cell mutagenicity No information available

Reproductive Toxicity No information available

**Specific target organ toxicity-
Single exposure** No information available

**Specific target organ toxicity-
Repeated exposure** No information available

Aspiration hazard No information available

Carcinogenicity There are no known carcinogenic chemicals in this product

12. Ecological Information

12.1 Ecotoxicity

12.1.1 For Methyl Methacrylate.

Fish:

Pimephales promelas (Fathead Minnow)		
LC50: 96h	243-275 mg/L	Flow-through
LC50: 96h	125.5–190.7 mg/L	Static

Lepomis macrochirus	(Bluegill)		
LC50: 96h	170-206 mg/L	Flow-through	
LC50: 96h	153.9-341.8 mg/L	Static	
Oncorhynchus mykiss	(Rainbow Trout)		
LC50: 96h	79mg/L	Flow-through	
LC50: 96h	79mg/L	Static	
Poecilia reticulata	(Guppy)		
LC50: 96h	326.4-426.9 mg/L	Static	

Algae:

Pseudokirchneriella subcapitata
EC50: 96h 170mg/L

Aquatic Invertebrates:

Daphnia magna (Water flea)
EC50: 48h 69mg/L

12.1.2 For Ethylhexyl Acrylate

Fish:

Leuciscus idus melanotus (Golden Ide)
LC50: 48h 23mg/L

Algae:

Desmodesmus Subspicatus
EC50: 72h 44mg/L
EC50: 96h 47mg/L

Aquatic Invertebrates:

Daphnia magna (Water flea)
EC50: 48h 17.45 g/L

12.2 Persistence and degradability:

Partially biodegradable.

12.3 Bioaccumulative potential:

No data is available on the product itself

Methyl Methacrylate	log Pow	0.7
2-Ethylhexyl Acrylate	log Pow	4.64

12.4 Mobility in soil

No data is available in the product itself

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

No information available

13. Disposal considerations

13.1 Waste from residue / unused products:

Dispose of as hazardous waste in compliance with local and national regulations.

13.2 Contaminated packaging:

Empty containers should be taken to an approved waste handling site for recycling and disposal. Labels must not be removed from containers before they have been cleaned. Empty containers may contain hazardous/ flammable residues and therefore must not be cut, punctured or have welding done on or near the containers. Containers should be cleaned by appropriate methods before re-use or disposal through metal recycling or into landfill.

14. Transport Information

14.1 This material is regulated under NZS5433: 2007 for land transport.

UN number	1866
Proper shipping name	1866 Resin solution
Class	3
Packing group	II
Labels	3YE

15. Regulatory information

15.1 HSNO approval:

Approval code:	HSR002495
HSNO Group standard	Additives, Process Chemicals and Raw Materials (Flammable).

15.2 HSNO Controls:

Approved Handler	Required to be present to supervise handling of product if present in quantities greater than 250 litres (when in containers greater than 5 litres).
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15.3 **Hazard Category:** Irritant, Highly Flammable, Sensitising.

16. Other Information

16.1 Hazard / classifications:

- 3.1B Flammable liquid- high hazard.
- 6.1D Substances that are acutely toxic- harmful.
- 6.3A Substances that are irritating to the skin.
- 6.4A Substances that are irritating to the eye.
- 6.5B Substances that are contact sensitisers.
- 6.9A Substances that are toxic to humans target organs or systems.
- 9.1D Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

16.2 Abbreviations/Terminology:

HSNO	Hazardous Substances and New Organisms Act.
CAS	Chemical Abstract Service.
LC50	Lethal concentration- concentration required to produce the specified effect in 50% of the sample studied.
EC50	Half maximal effective concentration
WES	Workplace Exposure Standard (NZ Ministry of Business, Innovation and Employment).
TWA	Time Weighted Average Exposure Level designed to protect from the effects of long- term exposure.
STEL	Short-term Exposure Level (15 minutes).
VOC	Volatile Organic Compound.
log Pow	Octanol water partition co-efficient
PBT	Persistent bioaccumulative and toxic
vPvT	Very persistent and very bioaccumulative

16.3 Issue information:

Date of preparation:	1 May 2014
Reasons:	Update and format change
Replaces:	2 July 2010

16.4 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 cannot 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.