

# Safety Data Sheet



## Hazardous Substance, Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

**Product name:** 976H0149 QUANTUM 221 STD HARDENER

**Recommended use:** Hardener for a polyurethane topcoat applied by spray. Also refer to the SDS for the topcoat before use.

**Supplier:** Dulux Protective Coatings Australia, a  
division of DuluxGroup (Australia) Pty Ltd  
**ABN:** 67 000 049 427  
**Street Address:** 1956 Dandenong Road  
Clayton VIC 3168  
Australia  
**Telephone:** 13 23 77

**Emergency telephone number:** Australia – 1800 033 111 New Zealand – 0800 734 607

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



#### Signal Word

Danger

#### Hazard Classification

Flammable Liquids – Category 3  
Acute Toxicity – Oral – Category 4  
Acute Toxicity – Dermal – Category 4  
Acute Toxicity – Inhalation – Category 4  
Skin Corrosion/Irritation – Category 2  
Sensitisation – Respiratory – Category 1A  
Sensitisation – Skin – Category 1A  
Specific Target Organ Toxicity (Single Exposure) – Category 3

#### Hazard Statement(s)

H226 Flammable liquid and vapour  
H302 Harmful if swallowed  
H312 Harmful in contact with skin  
H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H332 Harmful if inhaled  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H336 May cause drowsiness or dizziness

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## Prevention Precautionary Statement(s)

P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from all sources of ignition - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting and all other equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing mist, vapours or spray
P264	Wash hands, face and all exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective clothing, gloves, eye/face protection and suitable respirator as required
P285	In case of inadequate ventilation wear respiratory protection

## Response Precautionary Statement(s)

P101	If medical advice is needed, have product container or label at hand
P312	Call a POISON CENTRE or doctor/physician if you feel unwell
P301+310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
P331	Do NOT induce vomiting
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P302+352	IF ON SKIN: Wash with soap and water
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P363	Wash contaminated clothing before reuse
P333+313	If skin irritation or a rash occurs: Get medical advice/attention
P370+378	In case of fire: Use alcohol resistant foam for extinction

## Storage Precautionary Statement(s)

P405	Store locked up
P403+235	Store in a well ventilated place. Keep cool

## Disposal Precautionary Statement(s)

P501	Dispose of contents/container in accordance with local, regional, national and international regulations
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**Poisons Schedule (Aust):** S6

## DANGEROUS GOODS CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

**Class:** 3 Flammable Liquid

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## 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Polyisocyanate	-	30 - 60%
Propylene glycol monomethyl ether acetate	108-65-6	10 - 30%
Xylene, mixture of isomers	1330-20-7	10 - 30%
n-Butyl acetate	123-86-4	10 - 30%
Naphtha (petroleum), light aromatic	64742-95-6	1 - 10%
Ingredients determined to be non-hazardous	-	Balance
		100%

## 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

**Skin contact:** For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance. Components of this material can be absorbed through the skin with resultant toxic effects. Seek medical advice.

**Eye contact:** If in eyes wash out immediately with water. Seek medical attention.

**Ingestion:** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**PPE for First Aiders:** Wear overalls, safety glasses and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Notes to physician:** Treat symptomatically. Effects may be delayed.

## 5. FIRE-FIGHTING MEASURES

**Hazchem Code:** •3Y

**Suitable extinguishing media:** Alcohol resistant foam is the preferred fire-fighting medium. If material is involved in a fire use alcohol resistant foam, standard foam or dry agent (carbon dioxide, dry chemical powder).

**Specific hazards:** Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

**Fire fighting further advice:** Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

### LARGE SPILLS

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Use a spark-free shovel. If contamination of sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No:** 14

## 7. HANDLING AND STORAGE

**Handling:** Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**National occupational exposure limits:** No value assigned for this specific material by Safe Work Australia.

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m3	ppm	mg/m3		
Isocyanates, all (as NCO)	-	0.02	-	0.07	-	Sen
Propylene glycol monomethyl ether acetate	50	274	100	548	-	Sk
Xylene	80	350	150	655	-	-
n-Butyl acetate	150	713	200	950	-	-

As published by the Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

`Sen' notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

`Sk' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the following ingredients in this material requires Health Surveillance: Isocyanates.

**Engineering measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing air supplied mask. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

**Personal protection equipment:** I: OVERALLS, SAFETY SHOES, FACE SHIELD OR AIR MASK AND GLOVES.

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Wear overalls, safety shoes, face shield and impervious gloves. Use with adequate ventilation. If inhalation risk exists, wear air-supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** Clear, viscous liquid with a solvent odour.

<b>Solubility:</b>	Soluble in organic solvents. Insoluble in water.
<b>Specific Gravity (20 °C):</b>	1.1
<b>Relative Vapour Density (air=1):</b>	>1
<b>Vapour Pressure (20 °C):</b>	N Av
<b>Flash Point (°C):</b>	>23
<b>Flammability Limits (%):</b>	N Av
<b>Autoignition Temperature (°C):</b>	N Av
<b>Melting Point/Range (°C):</b>	N Av
<b>Boiling Point/Range (°C):</b>	N Av
<b>Decomposition Point (°C):</b>	N Av
<b>% Volatile by Volume:</b>	59
<b>pH:</b>	N Av
<b>Viscosity:</b>	N Av
<b>Total VOC (g/Litre):</b>	N Av

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

## 10. STABILITY AND REACTIVITY

**Reactivity:** No reactivity hazards are known for the material.

**Chemical stability:** This material is thermally stable when stored and used as directed.

**Hazardous reactions:** No known hazardous reactions.

**Conditions to avoid:** Elevated temperatures and sources of ignition.

**Incompatible materials:** Oxidising agents, acids, alkalis and amines.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### Acute Effects

**Inhalation:** Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness. A respiratory sensitiser. Can cause possible allergic reactions.

**Skin contact:** Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis. Components of this material can be absorbed through the skin. Effects can include those described for 'INGESTION'.

**Ingestion:** Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is uncoordinated there is greater likelihood of vomit entering the lungs and causing subsequent complications. Aspiration pneumonia (inflammation of the lung) may result.

**Eye contact:** May be an eye irritant.

### Acute toxicity

**Inhalation:** This material has been classified as a Category 4 Hazard.  
Acute toxicity estimate (based on ingredients): 10 - 20 mg/L

**Skin contact:** This material has been classified as a Category 4 Hazard.  
Acute toxicity estimate (based on ingredients): 1,000 - 2,000 mg/Kg

**Ingestion:** This material has been classified as a Category 4 Hazard.  
Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

**Corrosion/Irritancy:** Eye: this material has been classified as not corrosive or irritating to eyes.  
Skin: this material has been classified as a Category 2 Hazard (irritant to skin).

**Sensitisation:** Inhalation: this material has been classified as a Category 1A Hazard (respiratory sensitiser).  
Skin: this material has been classified as not a Category 1A Hazard (skin sensitiser).

**Aspiration hazard:** This material has been classified as non-hazardous.

**Specific target organ toxicity (single exposure):** This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in depression of the central nervous system.

### Chronic Toxicity

**Mutagenicity:** This material has been classified as non-hazardous.

**Carcinogenicity:** This material has been classified as non-hazardous.

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**Reproductive toxicity (including via lactation):** This material has been classified as non-hazardous.

**Specific target organ toxicity (repeat exposure):** This material has been classified as non-hazardous.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Acute aquatic hazard:** No information is available to complete an assessment.

**Long-term aquatic hazard:** No information is available to complete an assessment.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## 14. TRANSPORT INFORMATION

### ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

<b>UN No:</b>	1263
<b>Dangerous Goods Class:</b>	3 Flammable Liquid
<b>Packing Group:</b>	III
<b>Hazchem Code:</b>	•3Y
<b>Emergency Response Guide No:</b>	14

**Proper Shipping Name:** PAINT RELATED MATERIAL

**Segregation Dangerous Goods:** Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.



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## MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

**UN No:** 1263  
**Dangerous Goods Class:** 3 Flammable Liquid  
**Packing Group:** III

**Proper Shipping Name:** PAINT RELATED MATERIAL

## AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

**UN No:** 1263  
**Dangerous Goods Class:** 3 Flammable Liquid  
**Packing Group:** III

**Proper Shipping Name:** PAINT RELATED MATERIAL

## 15. REGULATORY INFORMATION

### This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)  
The Stockholm Convention (Persistent Organic Pollutants)  
The Rotterdam Convention (Prior Informed Consent)

### This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

### This material/constituent(s) is covered by the following requirements:

- The Standard for the *Uniform Scheduling of Medicines and Poisons (SUSMP)* established under the *Therapeutic Goods Act (Commonwealth)*.
- All the constituents of this material are listed on the *Australian Inventory of Chemical Substances (AICS)*.

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## 16. OTHER INFORMATION

### Literary reference

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: First issue.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.