

1. Identification of the substance/mixture and of the company/undertaking

| | |
|--|--|
| Product name | WB311 Satin Silver |
| Product code | 02050230 |
| reference number | 02052121 |
| Intended use of the substance/preparation | |
| Coating for professional use | |
| Supplier | DuPont (New Zealand) Ltd. |
| Street address | 98 Kerrs Road, Wiri, Manukau City, Auckland New Zealand |
| Telephone | (64)-9268-5500 |
| Telefax | (64)-9268-5490 |
| Emergency telephone | NZ Poisons Information Centre Ph: 0800 764 766 |
| Date of preparation | date |

2. Hazards identification

Not classified as a Dangerous Good under NZS 5433
 Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001

HSNO Classification

| | |
|--|---------------|
| Acute oral toxicity | Category 6.1E |
| Acute dermal toxicity | Category 6.1E |
| Skin corrosion/irritation | Category 6.3B |
| Toxicity for reproduction | Category 6.8B |
| Target Organ Systemic Toxicant - Single exposure | Category 6.9B |
| Target Organ Systemic Toxicant - Repeated exposure | Category 6.9B |
| Flammable liquids | Category 3.1D |
| Acute aquatic toxicity | Category 9.1C |

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown

GHS-Labeling

Hazard symbols



Signal word

Warning

Hazard statements

May be harmful in contact with skin.
 May be harmful if swallowed.
 Causes mild skin irritation.
 Suspected of damaging fertility or the unborn child.
 May cause damage to organs.
 Harmful to aquatic life.
 Combustible liquid

Precautionary statements

Do not breathe dust/fume/gas/mist/vapours/spray.
 Do not eat, drink or smoke when using this product.
 Keep away from flames and hot surfaces.
 Obtain special instructions before use.
 Wash hands after handling.
 Wear protective gloves and eye/face protection.
 If skin irritation occurs: Get medical advice/attention.
 Immediately call a POISON CENTER or doctor/physician.
 Store in a well-ventilated place. Keep cool.
 Store locked up.
 Dispose of contents/container in accordance with local regulation.

Other hazards which do not result in classification

Safety data sheet available for professional user on request.

3. Composition/information on ingredients

Pure substance/mixture

Mixture

| CAS-No. | Chemical Name | Concentration | GHS ardous | Haz- |
|-----------|-------------------------------|---------------|---------------|------|
| 111-76-2 | 2-butoxyethanol | 5 - 10% | ✓ | |
| 7429-90-5 | aluminium powder (stabilized) | 3 - 5% | ✓ | |
| 71-36-3 | n-butanol | 3 - 5% | ✓ | |
| 78-93-3 | butanone | 0.3 - 1.0% | ✓ | |
| 872-50-4 | N-methyl-2-pyrrolidone | 0.3 - 1.0% | ✓ | |
| 108-01-0 | 2-dimethylaminoethanol | 0.3 - 1.0% | | |
| 64-17-5 | ethanol | 0.1 - 0.3% | ✓ | |

Non-regulated ingredients 80 - 90%

4. First aid measures

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed
Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Notes to physician

No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Fire-fighting measures

Suitable extinguishing media

Water spray, Dry chemical, Foam.

Extinguishing media which shall not be used for safety reasons

High volume water jet

Specific hazards

Vapours may form explosive mixtures with air. Do not allow run-off from fire fighting to enter drains or water courses. Solvent vapours are heavier than air and may spread along floors. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: Full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental release measures

Personal precautions

Keep in a well-ventilated place. Keep away from sources of ignition. Comply with safety directives (see chapters 7 and 8). Do not inhale vapours.

Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

Methods for cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. Clean preferably with a detergent; avoid use of solvents.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area.

Storage

Suitable storage conditions

Observe label precautions. Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Suitable container and packaging materials for safe storage

Always keep in containers made of the same material as the supply container.

8. Exposure controls/personal protection

National occupational exposure limits

Workplace Exposure Standards (WESs) 2002

| Chemical Name | | |
|-------------------------------|------|-----------|
| 2-butoxyethanol | TWA | 25 ppm |
| | TWA | 121 mg/m3 |
| aluminium powder (stabilized) | TWA | 5 mg/m3 |
| | CEIL | 50 ppm |
| n-butanol | CEIL | 150 mg/m3 |
| | TWA | 150 ppm |

| Chemical Name | | |
|------------------------|------|-------------------------|
| | TWA | 445 mg/m ³ |
| | STEL | 300 ppm |
| | STEL | 890 mg/m ³ |
| N-methyl-2-pyrrolidone | TWA | 25 ppm |
| | TWA | 103 mg/m ³ |
| | STEL | 75 ppm |
| 2-dimethylaminoethanol | STEL | 309 mg/m ³ |
| | TWA | 2 ppm |
| | TWA | 7.4 mg/m ³ |
| ethanol | STEL | 6 ppm |
| | STEL | 22 mg/m ³ |
| | TWA | 1,000 ppm |
| | TWA | 1,880 mg/m ³ |

Engineering measures

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Eye protection

Wear protective eyewear for protection against solvent spatter.

Hand protection

The breakthrough time of gloves is unknown for the product itself. The glove material given is recommended on basis of the substances in the preparation.

| Chemical Name | Glove material | Glove thickness | Break through time |
|------------------------|------------------------|-----------------|--------------------|
| 2-butoxyethanol | Viton (R) [®] | 0.7 mm | 480 min |
| | Nitrile rubber | 0.33 mm | 480 min |
| n-butanol | Viton (R) [®] | 0.7 mm | 480 min |
| | Nitrile rubber | 0.33 mm | 480 min |
| butanone | Viton (R) [®] | 0.7 mm | 10 min |
| N-methyl-2-pyrrolidone | Nitrile rubber | 0.33 mm | 30 min |
| | Viton (R) [®] | 0.7 mm | 60 min |

The protective glove should be checked in each case for their work specific suitability (e.g. mechanical stability, product compatibility, and anti-static properties). When the intended use is for spray application a nitrile glove of the chemical resistance group 3 (e.g. Dermatrill[®] glove) is to be used. After contamination, the glove has to be changed. If immersing the hands into the product is not avoidable (e.g. maintenance work) a butyl or fluorocarbon rubber glove should be used. When skin exposure may occur to materials specified in section 3 of this SDS, advice should be sought from the glove supplier as to appropriate type to use with this product and the permeation breakthrough times. Care should be taken when working with sharp edged articles as

these can easily damage the gloves and make them ineffective. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Damaged gloves or those showing signs of wear should be replaced immediately.

Skin and body protection

Wear suitable protective clothing. Personnel should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

9. Physical and chemical properties

Appearance

Form : liquid Colour: silver Odor Threshold : no data available

| | | |
|--|------------------------|--------------------|
| pH | Not applicable. | |
| Freezing point | Not applicable. | |
| Boiling point | 100 °C | |
| Flash point | 69 °C | |
| Evaporation rate | Slower than Ether | |
| Flammability | | |
| Upper explosion limit | Not applicable. | |
| Lower explosion limit | Not applicable. | |
| Vapour pressure | 0.7 hPa | |
| Solubility | appreciable | |
| Vapour density | no data available | |
| Density | 1.02 g/cm ³ | DIN 53217/ISO 2811 |
| Partition coefficient: n-octanol/water | no data available | |
| Ignition temperature | 224 °C | DIN 51794 |
| Decomposition temperature | | |
| Viscosity (23 °C) | 30 s | ISO 2431-1993 6 mm |

10. Stability and reactivity

Stability

Stable

Hazardous polymerisation

Will not occur.

Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

Materials to avoid

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. Toxicological information

Information on the likely routes of exposure

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

| | |
|------------------------|------------|
| 2-butoxyethanol | Category 4 |
| n-butanol | Category 4 |
| butanone | Category 5 |
| N-methyl-2-pyrrolidone | Category 5 |

Acute dermal toxicity

| | |
|------------------------|------------|
| 2-butoxyethanol | Category 3 |
| n-butanol | Category 5 |
| N-methyl-2-pyrrolidone | Category 5 |

Acute inhalation toxicity

not hazardous
 % of unknown composition 13.6 %

Skin corrosion/irritation

| | |
|------------------------|------------|
| 2-butoxyethanol | Category 2 |
| n-butanol | Category 3 |
| butanone | Category 3 |
| N-methyl-2-pyrrolidone | Category 2 |

Toxicity for reproduction

| | |
|------------------------|------------|
| N-methyl-2-pyrrolidone | Category 2 |
|------------------------|------------|

Target Organ Systemic Toxicant - Single exposure

• **Skin Absorption**

- Narcotic effects** n-butanol
- Eyes** ethanol
- Kidney** 2-butoxyethanol
- Liver** 2-butoxyethanol
- Blood** 2-butoxyethanol
- Central nervous system** n-butanol, ethanol

• **Inhalation**

- Respiratory tract irritation** butanone, 2-butoxyethanol
- Respiratory system** N-methyl-2-pyrrolidone, ethanol
- Kidney** butanone
- Central nervous system** butanone, 2-butoxyethanol

• **Ingestion**

- Respiratory tract irritation** butanone
- Kidney** butanone
- Central nervous system** butanone
- Gastrointestinal tract** n-butanol

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**
 - Kidney** N-methyl-2-pyrrolidone
 - Blood** 2-butoxyethanol
- **Inhalation**
 - Central nervous system** butanone
- **Ingestion**
 - Peripheral nervous system** butanone
 - Central nervous system** butanone

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)

No information available.

Symptoms related to the physical, chemical and toxicological characteristics

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbition, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

12. Ecological information

Product contains environmentally hazardous substances and product is classified per GHS.

Ecotoxicity effects

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

Acute aquatic toxicity

| | |
|-------------------------------|------------|
| 2-butoxyethanol | Category 2 |
| aluminium powder (stabilized) | Category 4 |

% of unknown composition 18.1%

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in soil

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods:

Dispose of in accordance with local regulations.

Disposal considerations:

A disposal process that converts the waste into energy is recommended. If this is not possible the hazardous waste must be disposed of by incineration.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

Matters needing attention for transportation

Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

National regulatory information

| | |
|--|---------------|
| HSNO Approval Code | HSR002657 |
| HSNO Classification | |
| Acute oral toxicity | Category 6.1E |
| Acute dermal toxicity | Category 6.1E |
| Skin corrosion/irritation | Category 6.3B |
| Toxicity for reproduction | Category 6.8B |
| Target Organ Systemic Toxicant - Single exposure | Category 6.9B |
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| Flammable liquids | Category 3.1D |
| Acute aquatic toxicity | Category 9.1C |

16. Other information

Sources of key data used to compile the Safety Data Sheet
 Department

DuPont (New Zealand) Ltd.
 98 Kerrs Road, Wiri, Manukau City, Auckland
 New Zealand

Data Review Department
 Issuing date

Regulatory Affairs
 date

Revision Note

| Version | Changes |
|---------|--|
| 2.0 | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 |

Revision Date: 2009-10-15

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