

Issue date 06-Feb-2017

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Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name ThreeBond 1401B

Recommended use of the chemical and restrictions on use

Recommended use Adhesive, Sealant

Details of the supplier of the safety data sheet

Manufacturer

ThreeBond Singapore Pte.Ltd.
Australia Branch
Factory : 2/38 Jellico dev Scoresby
3179 Melbourne victoria Australia
TEL: 61-3-9753-2522
FAX: 61-3-9753-2566

Emergency telephone number

TEL: 0417-350-027 (Mr.Wesley Mallett)

Registration Number(s) No information available

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

| | |
|---|-------------|
| Flammable liquids | Category 2 |
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Inhalation (Vapors) | Category 4 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 3 |
| Serious eye damage/eye irritation | Category 2 |
| Reproductive Toxicity | Category 1A |
| Specific target organ toxicity (single exposure) | Category 1 |
| Category 1 Central nervous system retina systemic toxicity | |
| Category 3 Respiratory irritation, Narcotic effects. | |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Category 1 Central nervous system, retina | |
| Category 2 kidneys. | |

Label elements



Signal word

Danger

Hazard statements

H225 - Highly flammable liquid and vapor

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H360 - May damage fertility or the unborn child

H370 - Causes damage to organs

H372 - Causes damage to organs through prolonged or repeated exposure

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

Causes damage to the following organs: Central nervous system, retina, systemic toxicity.

Causes damage to the following organs through prolonged or repeated exposure: Central nervous system, retina.

May cause damage to the following organs through prolonged or repeated exposure: kidneys.

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Keep cool

Precautionary Statements - Response

- For first aid procedure, refer to this SDS.
- IF exposed: Call a POISON CENTER or doctor/physician
- For first aid procedure, refer to this SDS.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth.
- In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal plant

Other hazards

- Causes mild skin irritation

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No. | Weight-% |
|------------------------------|----------|----------|
| Methyl alcohol | 67-56-1 | 65-75 |
| Modified vinyl acetate resin | - | 25-35 |
| Toluene | 108-88-3 | 1-5 |
| Vinyl acetate | 108-05-4 | 0.1-1 |

Section 4: FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|--|
| General advice | Call 911 or emergency medical service Remove and isolate contaminated clothing and shoes |
| Eye contact | In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes |
| Skin contact | Wash skin with soap and water |
| Inhalation | Move victim to fresh air If breathing is irregular or stopped, administer artificial respiration Administer oxygen if breathing is difficult |
| Ingestion | Clean mouth with water and drink afterwards plenty of water |

For emergency responders

| | |
|---|---|
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device |
|---|---|

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--------------------------|
| Symptoms | No information available |
|-----------------|--------------------------|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed Keep victim warm and quiet |
|---------------------------|--|

Section 5: FIRE FIGHTING MEASURES

Flammable properties

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames Containers may explode when heated Many liquids are lighter than water

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam Move containers from fire area if you can do it without risk Dike fire control water for later disposal; do not scatter the material Use water spray or fog; do not use straight streams Water spray, fog or alcohol-resistant foam

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) Vapor explosion hazard indoors, outdoors or in sewers Runoff to sewer may create fire or explosion hazard Those substances designated with a "P" may polymerize explosively when heated or involved in a fire

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) All equipment used when handling the product must be grounded Do not touch or walk through spilled material Stop leak if you can do it without risk

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas

Methods and material for containment and cleaning up

Methods for containment A vapor suppressing foam may be used to reduce vapors Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal

Methods for cleaning up Use clean non-sparking tools to collect absorbed material Dike far ahead of liquid spill for later disposal

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information Water spray may reduce vapor; but may not prevent ignition in closed spaces

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas

Conditions for safe storage, including any incompatibilities

Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place

Incompatible materials Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

| Chemical name | ACGIH TLV | OSHA PEL | Japan |
|---------------------------|---------------------------------------|--|---|
| Methyl alcohol 67-56-1 | STEL: 250 ppm TWA: 200 ppm Skin | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S* | TWA: 200 ppm TWA: 260 mg/m ³ Skin ISHL/ACL: 200 ppm |
| Toluene 108-88-3 | TWA: 20 ppm | TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm | TWA: 50 ppm TWA: 188 mg/m ³ Skin ISHL/ACL: 20 ppm |
| Vinyl acetate 108-05-4 | STEL: 15 ppm TWA: 10 ppm | (vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m ³ (vacated) STEL: 20 ppm (vacated) STEL: 60 mg/m ³ | - |

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal protective equipment

| | |
|---------------------------------|------------------------------|
| Eye/face protection | Tight sealing safety goggles |
| Skin and body protection | Suitable protective clothing |
| Hand protection | Rubber gloves |
| Respiratory protection | No information available |

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------|-------------------|
| Physical state | Liquid |
| Odor | Alcohol odor |
| Color | Transparent green |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> |
|-------------------------------|--------------------|-----------------|
| pH | No data available | |
| Melting point/freezing point | No data available | |
| Boiling point / boiling range | 64 °C or above | |
| Flash point | 9 °C | Seta closed cup |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | | |
| Flammability limit in air | | |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Specific gravity | 0.88 | |
| Water solubility | Partially miscible | |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| Dynamic viscosity | 350 mPa·s | |

Section 10: STABILITY AND REACTIVITY

| | |
|---|---|
| Stability | Stable under normal conditions. |
| Possibility of hazardous reactions | React with strong acid. Could cause fire. |
| Conditions to avoid | Heat |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | May generate harmful gas by incineration |

Section 11: TOXICOLOGICAL INFORMATION**Product Information**

Unknown Acute Toxicity 28.98236283% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|--------------------|--------------|
| Oral LD50 | 102.00 mg/kg |
| Dermal LD50 | 308.00 mg/kg |
| Mist | 0.51 mg/l |

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------|----------------------|--------------------------|---|
| Methyl alcohol | = 6200 mg/kg (Rat) | = 15800 mg/kg (Rabbit) | = 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h |
| Toluene | = 2600 mg/kg (Rat) | = 12000 mg/kg (Rabbit) | = 12.5 mg/L (Rat) 4 h |
| Vinyl acetate | = 2900 mg/kg (Rat) | = 2335 mg/kg (Rabbit) | = 11.4 mg/L (Rat) 4 h = 11400 mg/m ³ (Rat) 4 h |

Chronic toxicity**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Chemical name | IARC |
|---------------|----------|
| Toluene | Group 3 |
| Vinyl acetate | Group 2B |

Irritation No information available

Corrosivity No information available

Sensitization No information available

Neurological effects No information available

Germ cell mutagenicity No information available

Reproductive toxicity

Developmental toxicity No information available

Target organ effects No information available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|----------------|---|---|--|
| Methyl alcohol | - | 28200: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 19500 - 20700: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13500 - 17600: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 18 - 20: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static | - |
| Toluene | 433: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 12.5: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static | 15.22 - 19.05: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 12.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 5.89 - 7.81: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 11.0 - 15.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 14.1 - 17.16: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 50.87 - 70.34: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 54: 96 h <i>Oryzias latipes</i> mg/L LC50 static 28.2: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 5.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 | 11.5: 48 h <i>Daphnia magna</i> mg/L EC50 5.46 - 9.83: 48 h <i>Daphnia magna</i> mg/L EC50 Static |

| | | | |
|---------------|---|--|--|
| | | <i>semi-static</i> | |
| Vinyl acetate | - | 14: 96 h <i>Pimephales promelas</i> mg/L LC50 static 15.04 - 21.54: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 26.1 - 36.63: 96 h <i>Poecilia reticulata</i> mg/L LC50 static | 52: 24 h <i>Daphnia magna</i> mg/L EC50 |

Persistence and degradability No information available.

Bioaccumulation No information available.

Mobility

| Chemical name | Partition coefficient |
|----------------|-----------------------|
| Methyl alcohol | -0.77 |
| Toluene | 2.7 |
| Vinyl acetate | 0.73 |

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues / unused products Disposal should be in accordance with applicable regional, national and local laws and regulations

Section 14: TRANSPORT INFORMATION

IMDG

UN/ID No. UN1992
 Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.
 Hazard class 3
 Subsidiary hazard class 6.1
 Packing group II
 EmS-No F-E, S-D

ICAO/IATA (air)

UN/ID No. UN1992
 Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.
 Hazard class 3
 Subsidiary hazard class 6.1
 Packing group II

ADR

UN/ID No. UN1992
 Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.
 Hazard class 3
 Labels 3 + 6.1
 Packing group II
 ERG code 3HP

Section 15: REGULATORY INFORMATION

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

Thailand - Hazardous Substances

| Chemical name | Thailand - Hazardous Substances |
|----------------|--|
| Methyl alcohol | Type 1 Hazardous Substance (Use as solvent in household products; FDA); Type 4 Hazardous Substance (In products intended for injection or spraying and in products that contact with skin or food when being used; FDA); Type 4 Hazardous Substance cutoff: >1% v/v (In products being used as fuel for cooking or warming food; FDA); Type 1 Hazardous Substance (Department of Industrial Works) |
| Toluene | Type 3 Hazardous Substance cutoff: >75% w/w (Department of Industrial Works) |
| Vinyl acetate | Type 2 Hazardous Substance (Department of Industrial Works) |

Enhancement and Conservation of National Environmental Quality Act Not applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data

ACGIH - Threshold Limit Values
 U.S. - OSHA - Final PELs
 Japan - Recommended Exposure Limits

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Revision note The symbol (*) in the margin of this SDS indicates that this line has been revised.

End of Safety Data Sheet