

# SAFETY DATA SHEET

PRODUCT NAME **Imtrade Bolta Duo® Herbicide**  
APVMA Product Code: 84061

## 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name **IMTRADE AUSTRALIA PTY LTD**  
Address 17 Ocean Street, Kwinana, Western Australia, AUSTRALIA, 6167  
Telephone 1800 171 799  
Fax 1800 171 788  
Emergency In a Transport Emergency Dial 000 – Police or Fire Brigade  
Web site <http://www.imtrade.com.au>  
Product Use: Agricultural herbicide for use as described on the product label.  
Creation Date: **February, 2017**  
This version issued: **First issue: April, 2018** and is valid for 5 years from this date.  
**Poisons Information Centre: Phone 13 1126 from anywhere in Australia**  
Product type: Blend of Prosulfocarb and Trifluralin in a suitable carrier system.

## SECTION 2 - HAZARDS IDENTIFICATION

### Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA.

Not subject to the ADG Code when transported by Road or Rail in Australia, but classed as Dangerous (Class 9, Environmentally Hazardous) by IATA and IMDG/IMSBC when carried by Air or Sea transport. However, this is a C1 Combustible Liquid so must be stored and handled as specified in AS 1940 "The storage and handling of flammable and combustible liquids."

**SUSMP Classification:** S6

**ADG Classification:** Class 9: Miscellaneous dangerous goods.

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trifluralin, Prosulfocarb).



### GHS Signal word: **WARNING**

Acute Toxicity Oral - Category 4

Skin Irritation - Category 2

Skin Sensitisation - Category 1

Eye irritation - Category 2B

Specific Target Organ Toxicity - Single Exposure - Category 3

Carcinogenicity - Category 2

Hazardous to aquatic environment Short term/Chronic - Category 1

### HAZARD STATEMENTS:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H320: Causes eye irritation.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer.

H410: Very toxic to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENTS:

#### PREVENTION

P102: Keep out of reach of children.

P201: Obtain special instructions before use.

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P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing fumes, mists, vapours or spray.

P262: Do not get in eyes, on skin, or on clothing.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing and eye or face protection.

#### RESPONSE

P362: Take off contaminated clothing and wash before reuse.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: If exposed or concerned: Get medical advice.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P337+P313: If eye irritation persists: Get medical advice.

P391: Collect spillage.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

#### STORAGE

P405: Store locked up.

P410: Protect from sunlight.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

#### DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

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#### Emergency Overview

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**Physical Description & Colour:** Red to brown liquid.

**Odour:** Characteristic odour.

**Major Health Hazards:** limited evidence of a carcinogenic effect, irritating to eyes and skin, harmful if swallowed, possible skin sensitiser. Signs and symptoms associated with mild exposures to organophosphate and carbamate pesticides include: headache, fatigue, dizziness, loss of appetite with nausea, stomach cramps and diarrhoea; blurred vision associated with excessive tearing; contracted pupils of the eye; excessive sweating and salivation; slowed heartbeat, often fewer than 50 per minute; rippling of surface muscles just under the skin. These symptoms may be mistaken for those of flu, heat stroke or heat exhaustion, or upset stomach. Moderately severe organophosphate and carbamate insecticide poisoning cases exhibit all the signs and symptoms found in mild poisonings, but in addition, the victim: is unable to walk; often complains of chest discomfort and tightness; exhibits marked constriction of the pupils (pinpoint pupils); exhibits muscle twitching; has involuntary urination and bowel movement. Severe poisonings are indicated by incontinence, unconsciousness and seizures.

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#### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

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Ingredients	CAS No	Conc,%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Prosulfocarb	52888-80-9	670g/L	not set	not set
Trifluralin	1582-09-8	250g/L	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

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#### SECTION 4 - FIRST AID MEASURES

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##### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

If swallowed, splashed on skin or inhaled, contact a Poisons Information Centre or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. Hospital treatment may be necessary.

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**Inhalation:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

**Skin Contact:** Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

**Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

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## SECTION 5 - FIRE FIGHTING MEASURES

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**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** In case of fire, use carbon dioxide, dry chemical, foam, water fog.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:** 130°C

**Upper Flammability Limit:** No data.

**Lower Flammability Limit:** No data.

**Autoignition temperature:** No data.

**Flammability Class:** Not flammable (GHS); C1 combustible (AS 1940)

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. Immediately call the Fire Brigade. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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## SECTION 7 - HANDLING AND STORAGE

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**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

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**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**SWA Exposure Limits                      TWA (mg/m<sup>3</sup>)                      STEL (mg/m<sup>3</sup>)**

Exposure limits have not been established by SWA for any of the known significant ingredients in this product.

The ADI for Prosulfocarb is set at 0.02mg/kg/day. The corresponding NOEL is set at 1.9mg/kg/day.

The ADI for Trifluralin is set at 0.02mg/kg/day. The corresponding NOEL is set at 2.5mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

**Skin Protection:** If you believe you may have a sensitisation to this product or any of its declared ingredients, you should prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following : rubber, PVC.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:**

<b>Physical Description &amp; colour:</b>	Red to brown liquid.
<b>Odour:</b>	Characteristic odour.
<b>Boiling Point:</b>	158-214oC (solvent)
<b>Freezing/Melting Point:</b>	No specific data. Liquid at normal temperatures.
<b>Volatiles:</b>	No specific data. Expected to be low at 100°C.
<b>Vapour Pressure:</b>	No data.
<b>Vapour Density:</b>	No data.
<b>Specific Gravity:</b>	about 1.10
<b>Water Solubility:</b>	Emulsifiable.
<b>pH:</b>	5-9
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Autoignition temp:</b>	No data.

**SECTION 10 - STABILITY AND REACTIVITY**

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** acids, bases, oxidising agents.

**Fire Decomposition:** Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** This product will not undergo polymerisation reactions.

**SECTION 11 - TOXICOLOGICAL INFORMATION****Local Effects:****SAFETY DATA SHEET**

**Target Organs:** There is no data to hand indicating any particular target organs.

Prosulfocarb is classed by SWA as a potential sensitiser by skin contact.

Trifluralin is classed by SWA as a potential sensitiser by skin contact.

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### Classification of Hazardous Ingredients

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Ingredient	Risk Phrases
Prosulfocarb	Conc>=25%: Xn; R22; R43
<ul style="list-style-type: none"> <li>Acute Toxicity - Category 4</li> <li>Skin Sensitisation - Category 1</li> <li>Hazardous to the Aquatic Environment (Chronic) - Category 2</li> </ul>	
Trifluralin	Conc>=1%: Xn; R40; R43
<ul style="list-style-type: none"> <li>Carcinogenicity - Category 2</li> <li>Skin Sensitisation - Category 1</li> <li>Hazardous to the Aquatic Environment (Acute) - Category 1</li> <li>Hazardous to the Aquatic Environment (Chronic) - Category 1</li> </ul>	
<b>Trifluralin:</b> LD <sub>50</sub> Oral, Rat >10,000mg/kg	LD <sub>50</sub> Dermal, Rabbit = >2,000mg/kg
LC <sub>50</sub> Inhalation, Rat = >2.8mg/L/4hr	

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### Potential Health Effects

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Persons sensitised to sensitisers identified above should avoid contact with this product.

#### Inhalation:

**Short Term Exposure:** Symptoms are described fully above.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

#### Skin Contact:

**Short Term Exposure:** Symptoms are described fully above.

**Long Term Exposure:** No data for health effects associated with long term skin exposure.

#### Eye Contact:

**Short Term Exposure:** This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

**Long Term Exposure:** No data for health effects associated with long term eye exposure.

#### Ingestion:

**Short Term Exposure:** Symptoms are described fully above.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

#### Carcinogen Status:

**SWA:** Trifluralin is classified by SWA as a Class 3 Carcinogen, possibly carcinogenic to humans.

See the SWA website for further details. A web address has not been provided as addresses frequently change.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** Trifluralin is Class 3 - unclassifiable as to carcinogenicity to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

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### SECTION 12 - ECOLOGICAL INFORMATION

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Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

#### Prosulfocarb

**Worms:** LD<sub>50</sub> (*Eisenia foetida*) >1000mg/kg

#### Persistence and Degradability:

Prosulfocarb is persistent in water (Degradation half-life: 159 - 279 d).

Prosulfocarb is not persistent in soil (Degradation half-life: 35 d).

#### Mobility in Soil:

Prosulfocarb has slight mobility in soil.

#### Bioaccumulative Potential:

Prosulfocarb bioaccumulates.

#### Trifluralin

**Effects on birds:** Trifluralin is practically non-toxic to birds. The LD<sub>50</sub> in bobwhite quail is greater than 2000 mg/kg, as it is in female mallards and pheasants. These values are for the technical product.

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**Effects on aquatic organisms:** Trifluralin is very highly toxic to fish and other aquatic organisms. The 96-hour LC<sub>50</sub> is 0.02 to 0.06 mg/L in rainbow trout, and 0.05 to 0.07 mg/L in bluegill sunfish. The 96-hour LC<sub>50</sub> in channel catfish is approximately 1.4 to 3.4 mg/L. Variables such as temperature, pH, life stage, or size may affect the toxicity of the compound. Trifluralin is highly toxic to Daphnia, a species of small freshwater crustacean, with a 48-hour LC<sub>50</sub> of 0.5 to 0.6 mg/L. The compound shows a moderate tendency to accumulate in aquatic organisms.

**Effects on other organisms:** At exposure levels well above permissible application rates (100 mg/kg), Trifluralin has been shown to be toxic to earthworms. However, permitted application rates will result in soil residues of approximately 1 ppm Trifluralin, a level that had no adverse effects on earthworms. It is non-toxic to bees.

#### Environmental Fate:

**Breakdown in soil and groundwater:** Trifluralin is of moderate to high persistence in the soil environment, depending on conditions. Trifluralin is subject to degradation by soil microorganisms. Trifluralin remaining on the soil surface after application may be decomposed by UV light or may volatilize. Reported half-lives of Trifluralin in the soil vary from 45 to 60 days to 6 to 8 months. After 6 months to 1 year, 80 to 90% of its activity will be gone. It is strongly adsorbed on soils and nearly insoluble in water. Because adsorption is highest in soils high in organic matter or clay content and adsorbed herbicide is inactive, higher application rates may be required for effective weed control on such soils. Trifluralin has been detected in nearly 1% of the 5590 wells tested. However, it has been detected at very low concentrations, typically ranging from 0.002 µg/L to 15 µg/L.

**Breakdown in water:** Trifluralin is nearly insoluble in water. It will probably be found adsorbed to soil sediments and particulates in the water column.

**Breakdown in vegetation:** Trifluralin inhibits the growth of roots and shoots when it is absorbed by newly germinated weed seedlings. Trifluralin residues in crop plants will occur only in root tissues which are in direct contact with contaminated soil. Trifluralin is not translocated into the leaves, seeds, or fruit of most plants. On most crops, Trifluralin applied to the leaves has no effect, but on certain crops, such as tobacco and summer squash, leaf distortion may occur.

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### SECTION 13 - DISPOSAL CONSIDERATIONS

**Disposal:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

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### SECTION 14 - TRANSPORT INFORMATION

**Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous by IATA and IMSBC when carried by Air or Sea transport (see details below).**

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trifluralin, Prosulfocarb).

**Hazchem Code:** ●3Z

**Special Provisions:** 179, 274, AU01

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

**Dangerous Goods Class:** Class 9: Miscellaneous Dangerous Goods.

**Packaging Group:** III

**Packaging Method:** P001, IBC03, LP01

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

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### SECTION 15 - REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredients: Prosulfocarb, Trifluralin are mentioned in the SUSMP.

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### SECTION 16 - OTHER INFORMATION

**This SDS contains only safety-related information. For other data see product literature.**

#### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>SWA</b>	Safe Work Australia, formerly ASCC and NOHSC
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer

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**NOS** Not otherwise specified  
**NTP** National Toxicology Program (USA)  
**R-Phrase** Risk Phrase  
**SUSMP** Standard for the Uniform Scheduling of Medicines & Poisons  
**UN Number** United Nations Number

This SDS summarises our best knowledge of the health and safety hazard information on the product, and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact Imtrade Australia Pty Ltd, or in the event of an emergency, 000. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

BOLTA DUO™ is a Registered Trademark of Imtrade Australia Pty Ltd

**Please read all labels carefully before using product.**

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (Feb 2016)

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<http://www.kilford.com.au/> Phone (02)9251 4532

End of Report

**SAFETY DATA SHEET**