

# MATERIAL SAFETY DATA SHEET



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## STATEMENT OF HAZARDOUS NATURE

Hazardous according to criteria of National Occupational Health and Safety Commission.

R22 – Harmful if swallowed.

R36/38 – Irritating to eyes and skin.

R65 – Harmful: May cause lung damage if swallowed.

## COMPANY DETAILS:

Company: Bayer CropScience Pty Ltd ABN 87 000 226 022  
Address: 391 – 393 Tooronga Road, East Hawthorn  
Victoria 3123 Australia  
Telephone/Facsimile: (03) 9248 6888/(03) 9248 6800  
Website Address: [www.bayercropscience.com.au](http://www.bayercropscience.com.au)  
Emergency Telephone Number: 1800 033 111 - Orica SH&E Shared Services

## IDENTIFICATION

Product Name: **Saturn® EC Rice Herbicide**  
Other Names: Not applicable  
Manufacturer's Product Code: TP-AUS012  
SAP Product Codes: 17253 (20L), 17117 (100 L), 17254 (1000 L)  
UN Number: Not applicable  
Dangerous Goods Class and Subsidiary Risk: Not classified as dangerous goods for transport by road or rail.  
Hazchem Code: Not applicable  
Proper Shipping Name: Not applicable  
Packing Group: Not applicable  
EPG: Not applicable  
Chemical Family: Thiocarbamate  
Poisons Schedule Number: 5  
Use: Herbicide for use in rice

## Physical Description/Properties

Appearance: Clear amber liquid with negligible odour  
Boiling Point/Melting Point: Not available  
Vapour Pressure: 2.93 mPa at 23° C (thiobencarb)  
Density: 1.1 g/mL at 20° C  
Flashpoint: 75° C (Pensky Martens Closed Cup)  
Flammability Limits: Not available  
Solubility in Water: Forms an emulsion

## Other Properties:

pH: 6.0 to 8.0 (1% emulsion in water)  
Formulation: Emulsifiable concentrate

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## Ingredients:

Chemical Name:	CAS Number:	Proportion g/L:
Thiobencarb	[28249-77-6]	800
Hydrocarbon solvent	[64742-94-5]	180
Emulsifiers	(not hazardous)	120

## HEALTH HAZARD INFORMATION

### Health Effects:

#### Acute:

- Swallowed: Harmful if swallowed.
- Eye: Irritating to eyes.
- Skin: Irritating to skin.
- Inhaled: May be irritating to respiratory tract and may cause headaches and dizziness.

#### Chronic:

Non-mutagenic, non-teratogenic and non-oncogenic. Prolonged or frequent contact may defat and dry the skin, leading to discomfort and dermatitis.

### First Aid

**If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.**

- Swallowed: Wash out mouth with water. Do NOT induce vomiting. Give a glass of water. Keep patient at rest and seek medical advice as above. Do not give anything by mouth to a semi-conscious or unconscious person.
- Eye: Rinse immediately with clean water for at least 15 minutes and obtain medical aid.
- Skin: Carefully remove contaminated clothing. Wash affected areas with soap and water. Seek medical aid if at all worried.
- Inhaled: Remove victim to fresh air and keep at rest. Obtain medical advice if at all worried.
- First Aid Facilities: Provide washing facilities for eyes and skin in the workplace.

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## HEALTH HAZARD INFORMATION – continued

### Advice to Doctor:

#### *Symptoms of poisoning:*

In animal studies very large doses of thiobencarb caused hypoactivity, abnormal walking and prostration.

#### *Treatment:*

For local contamination, treatment should be symptomatic after decontamination. In case of skin or eye contamination, treat as instructed under "First Aid".

For systemic poisoning, treatment should be symptomatic and supportive.

This product also contains a hydrocarbon solvent. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

NB Thiobencarb is not a cholinesterase inhibitor.

## PRECAUTIONS FOR USE

### Exposure Standards:

No exposure standard has been assigned by the National Occupational Health and Safety Commission.  
The manufacturer of the solvent recommends an Occupational Exposure Limit of 100 ppm total hydrocarbons.

### Engineering Controls:

Control process conditions to avoid contact. Use only in well-ventilated areas.

### Personal Protection:

Eyes: Wear safety goggles or a face shield.  
Clothing: Wear cotton overalls buttoned to the neck and wrist and a washable hat.  
Gloves: Wear elbow length PVC gloves.  
Respiratory: If inhalation is likely, wear a respirator with an organic vapour cartridge.  
Other: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles or face shield, respirator face piece and contaminated clothing.

### Flammability:

Combustible liquid Class C1 (flashpoint between 61° C and 150° C)

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## SAFE HANDLING INFORMATION

### Storage and Transport:

Corrosivity Hazards: None known

### Handling & Storage Precautions:

Keep out of reach of children. Avoid contact with eyes and skin. Do not inhale spray mist. If clothing becomes contaminated with product or wet with spray, remove it immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water.

Store in the closed, original container in a cool, dry, well-ventilated area. Do not store for prolonged periods in direct sunlight. Do not store near heat, open flame or hot surfaces. Store in locked room or place away from children, animals, food, animal feed, seed and fertilisers.

### Transport:

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

### Spills and Disposal:

#### Spillage or Leak Procedures:

Shut off or remove any sources of ignition. DO NOT smoke. Avoid contact with the spilled material or contaminated surfaces. When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section above. Keep people and animals away and upwind. Prevent spilled material from entering drains or watercourses. Contain spill - remove liquid mechanically (explosion proof or hand pump) or absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labelled, loosely covered drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

#### Waste Disposal Methods:

When returnable container is empty or contents no longer required return it to the point of purchase. For non-returnable containers, triple or (preferably) pressure rinse them before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Dispose of waste product via a licensed disposal contractor to an approved landfill.

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## SAFE HANDLING INFORMATION – continued

### Fire/Explosion Hazard:

Extinguishing Media: Dry chemical, foam, water spray.

### Special Fire Fighting Procedures:

This product is a combustible liquid. Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716), as toxic decomposition products may be produced in a fire. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area to prevent contamination of water sources. Dispose of fire control extinguishing agent and spillage in a safe manner.

### Reactivity Hazards:

Incompatible with strong acids, strong alkalies and oxidising materials. If burnt, oxides of carbon, nitrogen and sulphur may be produced.

### OTHER INFORMATION:

#### Animal toxicity data (thiobencarb):

Oral LD <sub>50</sub> (mg/kg)	1033	Species	Rat (M)
Oral LD <sub>50</sub> (mg/kg)	1130	Species	Rat (F)
Dermal LD <sub>50</sub> (mg/kg)	> 2000	Species:	Rat & rabbit
Inhalation LC <sub>50</sub> (mg/L)	43 (1 h)	Species:	Rat
Eye irritation	Irritating	Species;	Rabbit
Skin irritation	Irritating	Species:	Rabbit

#### Environmental / Ecological Effects: (thiobencarb)

Toxic to fish and aquatic organisms. Non-toxic to birds and bees.

##### *Fish toxicity:*

LC<sub>50</sub>, (48 h) carp – 3.6 mg/L

LC<sub>50</sub> (48 h) bluegill sunfish – 2.4 mg/L

##### *Bird toxicity:*

LC<sub>50</sub> hens – 2629 mg/kg

LC<sub>50</sub> bobwhite quail – > 7800 mg/kg

LC<sub>50</sub> mallard ducks – > 10 000 mg/kg

##### *Algal toxicity:*

EC<sub>50</sub> (120 h) for *Anabaena flos-aquae* > 3.1, *Navicula pelliculosa* 0.38, *Selenastrum capricornutum* 0.017, *Skeletonema costatum* 0.073 mg/L

##### *Other:*

LC<sub>50</sub> (48 h) *Daphnia magna* – 0.1 mg/L

Rapidly adsorbed by soil, and not readily leached.

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT drain rice water into regional drains within the withholding period after Saturn application as defined by the NSW Environment Protection Authority (EPA) or the local irrigation authority.

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## OTHER INFORMATION (continued):

Special Precautions /  
Comments: None

Data Sources /  
References: Bayer CropScience Pty Ltd and Kumiai Chemical product safety data  
and published data

## CONTACT POINT:

Emergency Contact Number: 1800 033 111 (Orica SH&E Shared Services)  
Development Manager: (03) 9248 6888

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS 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 this company.

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.

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