



SAFETY DATA SHEET

DATE: 22nd July 2024

1. Identification

Product Name: Flutamide

CAS Number: 13311-84-7

Recommended use/Use advised against: No information available

Details of the Australian Supplier:

Astral Scientific Pty Ltd
29 Mangrove Lane
Taren Point NSW 2229

Company Phone Number: 02 9540 2055

Email Address: support@astralscientific.com.au

Emergency Telephone Number: 13 11 26

2. Hazard(s) Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word: Danger

Hazard Statements: Harmful if swallowed. Causes skin irritation Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Causes damage to: Liver



Precautionary Statements: PREVENTION: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapors or spray. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. RESPONSE: If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. 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 or attention. If exposed: Call a poison center or doctor. STORAGE: Store locked up. DISPOSAL: Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc

3.Composition / Information on ingredients

Component	CAS #	Purity / Weight %
Flutamide	13311-84-7	>98.0%(GC)

4.First-aid measures

General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink plenty of water afterwards. Get immediate medical attention if symptoms occur. Never give anything by mouth to an unconscious person.

Most important symptoms/effects May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

Notes to physician Treat symptomatically

5.Fire-fighting measures

Suitable extinguishing media	Dry chemical, foam, water spray, carbon dioxide.
Unsuitable extinguishing media	No information available
Flash Point	No information available
Method	No information available
Autoignition temperature	No information available

Explosion limits

Upper No information available

Lower No information available

Sensitivity to mechanical impact No information available

Sensitivity to static discharge No information available

Specific hazards arising from the chemical

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Hazardous combustion products

These products include: Carbon oxides Nitrogen oxides Halogenated compounds

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Other specific hazards:

WARNING: Highly toxic HF gas is produced during combustion.

6.Accidental release measure

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions Should not be released into the environment. See section 12 for additional Ecological Information.

Methods for containment/clean-up Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

7.Handling and storage

Handling Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated. Avoid all contact!

Storage Keep container tightly closed. Store in a cool and dark place. Store below 25°C. Store locked up. Store away from incompatible materials such as oxidizing agents. Light-sensitive

8.Exposure controls / personal protection

Personal protective equipment

Eye/Face protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by oSHA's eye and face protection regulations in 29 CFR 1910. 133 or European Standard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory protection	Use a approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9.Physical and chemical properties

Physical state	Solid
Appearance	No information available
Odor	Odorless
Odor threshold	No information available
pH	No information available
Melting point/range	112°C (234°F)
Boiling point/range	No information available
Flash point	No information available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Flammability or explosive elements	
Upper	No information available
Lower	No information available
Vapor pressure	No information available
Vapor density	Not applicable
Specific gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition temperature	No information available

Decomposition temperature No information available

Viscosity Not applicable

10.Stability and reactivity

Reactive hazard No data available

Stability Stable under normal conditions

Incompatible materials Oxidizing agents

Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen fluoride

Hazardous reactions No special reactivity has been reported.

11.Toxicological information

Acute Toxicity

ipr-rat LD50:289 mg/kg

orl-man TDLo:310 mg/kg/31D-I

scu-rat TDLo:10 mg/kg

orl-dog LD50:>2 g/kg

orl-rat LD50:787 mg/kg

Toxicologically synergistic products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity orl-rat TDLo:2730 mg/kg/1Y-I

Component	CAS No	IARC	NTP	OSHA
Flutamide	13311-84-7	No data available	No data available	No data available

Mutagenic effects No information available

Reproductive effects No information available

Developmental effects No information available

Teratogenicity No information available

STOT – single exposure	None known
STOT – repeated exposure	None known
Aspiration hazard	No information available
Symptoms/effects, both acute and delayed	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Endocrine disruptor information	No information available
Other adverse effects	The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains

Persistence and degradability No information available

Bioaccumulation/accumulation No information available

Mobility

Component	Log Pow
Flutamide	3.35

13. Disposal considerations

Waste disposal methods Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

14. Transport information

DOT	Non-hazardous for transportation
TDG	Non-hazardous for transportation
IATA	Non-hazardous for transportation
IMDG/IMO	Non-hazardous for transportation

15.Regulatory information

International Inventories

TSCA Not listed

Note *Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL Complies

EINECS/ELINCS Complies

ENCS This product complies with ENCS:

IECSC This product does not comply with china:

KECL Does not Comply

PICCS Does not Comply

AICS All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Revision date 22nd July 2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet