



# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

## Goltix Titan

Revision Date 07-Oct-2018

Version 1

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

### 1.1. Product identifier

#### Goltix Titan

Pure substance/mixture

Mixture

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use

Herbicide

Uses advised against

No information available

### 1.3. Details of the supplier of the safety data sheet

Supplier Address

ADAMA Agricultural Solutions UK Ltd  
Unit 15, Thatcham Buisness Village Colthrop Way,  
Thatcham Berkshire RG19 4LW, UK : 01635 860555  
Fax: 01635 861555

For further information, please contact

Email address

ukenquiries@adama.com

### 1.4. Emergency telephone number

Emergency Telephone

National Chemical Emergency Centre (UK):  
Tel: 01865 407333 (24 hours)

## Section 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the Aquatic

Category 2 - (H411)

Environment - Chronic Hazard

### 2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



<b>Hazard Statements</b>	H411 - Toxic to aquatic life with long lasting effects
<b>Precautionary Statements</b>	P102 - Keep out of reach of children P501 - Dispose of contents/ container to an approved waste disposal plant
<b>EU Specific Hazard Statements</b>	EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
<b>Additional phrases for PPP</b>	SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

**2.3. Other hazards**  
No information available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixture

Chemical Name	Weight-%	CAS No	EC No	Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	M-Factor	REACH Registration Number
Metamitron	42 - 48	41394-05-2	255-349-3	613-129-00-8	Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	M=1	-
Quinmerac (ISO)	2 - 5	90717-03-6	402-790-6	-	Aquatic Chronic 3 (H412)		-
1,2-Benzisothiazolin-3-one	<0.5	2634-33-5	220-120-9	613-088-00-6	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)		-

Full text of H- and EUH-phrases: see section 16

### Section 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

**Self-protection of the first aider** Use personal protective equipment as required.

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms** None known

**4.3. Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**Section 5: FIRE-FIGHTING MEASURES**

**5.1. Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

**5.2. Special hazards arising from the substance or mixture**

No specific hazard known.

**5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus  
In the event of fire and/or explosion do not breathe fumes.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Use personal protective equipment as required.

**For emergency responders**

Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

**6.3. Methods and material for containment and cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**6.4. Reference to other sections**

**Other Information**

See also section 8,13

**Section 7: HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**7.3. Specific end use(s)**

**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**8.2. Exposure controls**

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Hand Protection</b>	Gloves made of plastic or rubber.
<b>Body Protection</b>	Suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>General Hygiene Considerations</b>	When using do not eat, drink or smoke. Wash contaminated clothing before reuse.
<b>Environmental exposure controls</b>	Do not allow into any sewer, on the ground or into any body of water.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
<b>Physical state</b>	: Liquid		
<b>Color</b>	: Off-white		
<b>Odor</b>	: characteristic		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 3.2 - 4.2	CIPAC MT 75.3	solution (1 %)
<b>Melting point/freezing point °C</b>	: ----		Not Applicable
<b>Boiling point/boiling range °C</b>	: ----		Not Applicable
<b>Flash point °C</b>	: > 99	EEC A.9	
<b>Evaporation rate</b>	: Not Applicable		
<b>Flammability (solid, gas)</b>	: Not applicable for liquids		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: ----		Not Applicable
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: 1.213 - 1.113	CIPAC MT 3.3	
<b>Solubility(ies) mg/l</b>	: ----		Not Applicable
<b>Partition Coefficient (n-octanol/water) Log Pow</b>	:		See Section 12 for more information
<b>Autoignition temperature °C</b>	: ----		No data available
<b>Decomposition temperature °C</b>	: ----		No data available
<b>Kinematic viscosity mm<sup>2</sup>/s 40 °C</b>	: 825	CIPAC MT 192	

**Explosive properties** : Not an explosive  
**Oxidizing properties** : Not oxidizing

**9.2. Other information**

**Bulk density g/ml** : ---- Not Applicable  
**Surface tension mN/m** : 46.9 OECD 115

**Section 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal processing.

**10.4. Conditions to avoid**

Heat, flames and sparks.

**10.5. Incompatible materials**

No information available

**10.6. Hazardous decomposition products**

None under normal use conditions.

**Section 11: TOXICOLOGY INFORMATION**

**11.1. Information on toxicological effects**

**Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Oral LD50 mg/kg</b>	: > 2000	Rat	OECD 423	
<b>Dermal LD50 mg/kg</b>	: > 2000	Rat	OECD 402	
<b>Inhalation LC50 mg/l/4h</b>	: > 5.57	Rat	OECD 403	
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	OECD 404	
<b>Serious eye damage/eye irritation</b>	: Not irritating to eyes	Rabbit	OECD 405	
<b>Respiratory/skin sensitization</b>	: Not a skin sensitizer	Guinea pig	OECD 406	

**Chronic toxicity**

**Germ cell mutagenicity**

**Chemical Name**  
 Metamitron : Not classified  
 Quinmerac (ISO) : Not classified

**Carcinogenicity**

**Chemical Name**  
 Metamitron : Not Carcinogenic  
 Quinmerac (ISO) : Not Carcinogenic

**Reproductive toxicity**

**Chemical Name**  
 Metamitron : Not toxic for the reproductive system

Quinmerac (ISO) : Not toxic for the reproductive system

**STOT - single exposure**

**Chemical Name**

Metamitron : Not available  
 Quinmerac (ISO) : Not available

**STOT - repeated exposure**

**Chemical Name**

Metamitron : Not available  
 Quinmerac (ISO) : Not available

**Aspiration hazard**

**Chemical Name**

Metamitron : Not available  
 Quinmerac (ISO) : Not available

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Aquatic toxicity**

<b>Acute toxicity</b>	<b>Values</b>	<b>Species</b>	<b>Method</b>	<b>Remarks</b>
<b>Fish 96-hour LC50 mg/l</b>	: > 100	Oncorhynchus mykiss	OECD 203	
<b>Crustacea 48-hour EC50 mg/l</b>	: > 100	Daphnia magna	OECD 202	
<b>Algae 72-hour EC50 mg/l</b>	: 3.77	P. subcapitata	OECD 201	
<b>Other plants EC50 mg/l</b>	: 2.09	Lemna gibba	OECD 221	

**Terrestrial Toxicity**

**Birds Oral LD50 mg/kg**

**Chemical Name**

Metamitron : 1302 Japanese quail OECD 401  
 Quinmerac (ISO) : > 2000 Bobwhite quail

**Bees Oral LD50 µg/bee**

**Chemical Name**

Metamitron : > 97.2 OECD 213  
 Quinmerac (ISO) : > 108.51

**12.2. Persistence and degradability**

**Abiotic Degradation**

**Water DT50 days**

**Chemical Name**

Metamitron : 10.8 - 11.4 BBA IV: 5-1 pH 8, 20 ° C  
 Quinmerac (ISO) : ---- OECD 111 Stable; pH 4,7,9

**Soil DT50 days**

**Chemical Name**

Metamitron : 2 - 45  
 Quinmerac (ISO) : 10.5 Field

**Biodegradation**

**Chemical Name**

Metamitron : Not readily biodegradable OECD 301 D  
 Quinmerac (ISO) : Not readily biodegradable

**12.3. Bioaccumulative potential**

<b>Partition Coefficient (n-octanol/water) Log Pow</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
<b>Chemical Name</b> Metamitron	: 0.85	OECD 107	21 ° C
Quinmerac (ISO)	: </= -0.2	OECD 117	pH 7
<b>Bioconcentration factor (BCF)</b>			
<b>Chemical Name</b> Metamitron	:		Not available
Quinmerac (ISO)	: ----		No data available

**12.4. Mobility in soil**

<b>Adsorption/Desorption</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
<b>Chemical Name</b> Metamitron	: 122.3		Koc
Quinmerac (ISO)	: 0.82		Koc

**12.5. Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**12.6. Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORTATION INFORMATION****IMDG/IMO**

<b>14.1 UN/ID No *</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Metamitron )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Marine pollutant</b>	Yes
<b>14.6 Special precautions for user</b>	

**RID/ADR**

<b>14.1 UN/ID No *</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Metamitron )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special precautions for user</b>	
<b>14.7 Tunnel restriction code</b>	-

**ICAO/IATA**

<b>14.1 UN/ID No *</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Metamitron )
<b>14.3 Hazard Class</b>	9

14.4 Packing Group	III
14.5 Environmental hazard	Yes
14.6 Special precautions for user	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable



\* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

## Section 15: REGULATORY INFORMATION

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

### 15.2. Chemical safety assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

## Section 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H400 - Very toxic to aquatic life  
H411 - Toxic to aquatic life with long lasting effects  
H412 - Harmful to aquatic life with long lasting effects

### List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
CAS Number - Chemical Abstracts Service number  
EC Number - EINECS and ELINCS Number  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
OECD - Organization for Economic Co-operation and Development  
PBT - Persistent, Bioaccumulative and Toxic substance  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
STOT - Specific Target Organ Toxicity  
vPvB - Very Persistent and Very Bioaccumulative

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Revision Note** Changes made to the last version are labeled with this sign \*\*\*.

**Disclaimer**

The information provided in this Material 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