	<b>MATERIAL SAFETY DATA SHEET</b>	Version 1
		Creation date: 08/06/2021
		Publish date: 08/06/2021
<b>TYLLANEX EXTRA</b>		

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Terbuthylazine 497.2G/L + S-Metolachlor 102.8G/L SC

REGISTRATION HOLDER:	ADAMA South Africa (Pty)Ltd Ground Floor, Simeka House, The Vineyards Office Estate, 99 Jip de Jager Drive, Bellville, 7530 Tel: +27 21 982 1460
Emergency numbers	+27 82 446 8946 + 27 861 555 777
CHEMICAL NAME:	Terbuthylazine: N2-tert-butyl-6-chloro-N4-ethyl-1,3,5-triazine-2,4-diamine S-Metolachlor: Mixture of: (aRS, 1 S)-2-chloro-N-(6-ethyl-o-tolyl)-N-(2-methoxy -1-methylethyl) acetamide (80-100%) and (aRS, 1 R)-2-chloro- N-(6-ethyl-o-tolyl)-N-(2-methoxy-1-methylethyl)acetamide (20-0%)
CAS NUMBER:	Terbuthylazine: 5915-41-3 S-Metolachlor: 87392-12-9
MOLECULAR FORMULA:	Terbuthylazine: C <sub>9</sub> H <sub>16</sub> ClN <sub>5</sub> S-Metolachlor: C <sub>15</sub> H <sub>22</sub> ClNO <sub>2</sub>
MOLECULAR WEIGHT:	Terbuthylazine: 229.7 S-Metolachlor: 283.8
CHEMICAL FAMILY:	Terbuthylazine: Triazine S-Metolachlor: Chloroacetamide
USE:	Herbicide

## 2. COMPOSITION / INFORMATION ON INGREDIENTS


TERBUTHYLAZINE:	497.2G/L w/v
S-METOLACHLOR:	102.8G/L w/v

## 3. HAZARDS IDENTIFICATION

May be harmful if swallowed  
 Causes mild skin irritation  
 May cause an allergic skin reaction  
 Causes serious eye irritation  
 Suspected of causing cancer  
 Toxic to aquatic life with long lasting effects

## 4. FIRST - AID MEASURES

INHALATION:	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
SKIN CONTACT:	Remove contaminated clothing, shoes and leather goods immediately. Immediately flush skin with running water for at least 20 minutes. If irritation persists, seek medical advice immediately. Wash contaminated clothing before re-use.
EYE CONTACT:	Immediately flush the eyes with clean, gently flowing water for at least 15-20 minutes. Remove contact lenses. If eye

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irritation persists get medical advice/attention.

INGECTION: Rinse mouth with water. Do not induce vomiting. Seek medical advice immediately.

## 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
UNSUITABLE EXTINGUISHING MEDIA:	Do not use solid water stream as it may scatter and spread fire.
PROTECTIVE EQUIPMENT:	Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus
SPECIFIC METHODS:	Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapors and fumes from burning materials. Remove container from fire area if possible and without risk. Do not allow run-off from fire-fighting to enter drains or water courses.

## 6. ACCIDENTAL RELEASE MEASURES


PERSONAL PRECAUTIONS:	Avoid contact with skin, eyes, and clothing. Do not breathe in spray or fumes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear a combination gas, vapor and particulate respirator, chemical resistant gloves, chemical safety goggles and chemical resistant clothing.
ENVIRONMENTAL PRECAUTIONS:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

## 7. HANDLING AND STORAGE

HANDLING:	No special protective measures against fire required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.
STORAGE:	Keep under lock and key and out of reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapors are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.
EYES:	If eye contact is possible, use tight-fitting chemical safety goggles.

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**RESPIRATORY:** A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

**SKIN AND BODY:** Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.)

**HANDS:** Chemical resistant gloves should be used (nitrile rubber).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Off-White free flowing liquid
ODOR:	Odourless
DENSITY:	1.11 g/ml at 20°C
pH:	6.0-8.5
SOLUBILITY IN WATER:	Miscible
EXPLOSIVE PROPERTIES:	Not explosive
OXIDIZING PROPERTIES:	Not oxidizing

## 10. STABILITY AND REACTIVITY

STORAGE STABILITY:	Considered stable for a period of 2 years in normal conditions.
CONDITIONS TO AVOID:	Combustion or thermal decomposition will evolve toxic and irritant vapors
HAZARDOUS POLYMERIZATION:	Will not occur

## 11. TOXICOLOGICAL INFORMATION

ACUTE ORAL LD50(Rat):	3181 mg/kg
ACUTE DERMAL LD50(Rat):	>3700 mg/kg
INHALATION (Rat):	>8 mg/L (4h)
EYE IRRITATION:	Irritating
SKIN IRRITATION:	Mildly irritating
SKIN SENSITIZATION:	A skin sensitizer


## 12. ECOLOGICAL INFORMATION

TOXICITY TO FISH:	LC50 (96h) Rainbow trout: 5.2 mg/l
TOXICITY TO DAPHNIA:	EC50 (48h) Daphnia: 20 mg/l
TOXICITY TO ALGAE:	EC50 (72h) Green algae: 0.03 mg/l

## 13. DISPOSAL CONSIDERATIONS

### PESTICIDE DISPOSAL:

Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

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**CONTAINER DISPOSAL:**

Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers. Comply with local legislation applying to waste disposal.

**14. TRANSPORT INFORMATION**

Not dangerous good

**15. OTHER INFORMATION**

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.