

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY

Product:
TYLLANEX SC

Manufacturer:
AGAN CHEMICAL MANUFACTURERS LTD.
P.O.Box 262, Ashdod 77102, Israel
Tel: 08-547211
Tlx: 381858 AGRAG IL
Fax: 08-547388

Common name of active ingredient:
terbutylazine

Chemical name of active ingredient: 2-tert-butylamino-4-chloro-6-ethylamino-1,3,5-triazine	CAS Reg.No. 5915-41-3
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HAZARDS

PRODUCT HAZARD CLASSIFICATION	CLASSIFICATION SYSTEM
Fire : low	(X) U.S. EPA
Health : low	() EC
Transportation : not restricted	() Other
Other : -	
SIGNAL WORD : CAUTION	

HAZARDOUS COMPONENT LISTING	g/L	WT %	HAZARD	RATING
terbutylazine	400-600	40-60	irritant	slight
ethylene glycol (=EG)	90-120	10	inhalation	ACGIH TLV - 50 ppm

PHYSICAL DATA

Appearance and odour : Milky liquid, faint smell.			
Boiling point 100°C (H ₂ O) 198°C (EG)	Vapour density (air=1) 2.14 (EG)	Volatiles, wt % 40-50% (H ₂ O + EG)	log K _{ow} * NK
Melting point NA	Vapour pressure* 0.15 mPa @ 20°C	Density(water=1) or Sp.Gr. 1.09 ± 0.02 @ 20°C	Solubility in water* 8.5 ppm

NA = not applicable

NK = not known

* Value for pure active ingredient

FIRE

Material is : <input type="checkbox"/> flammable <input checked="" type="checkbox"/> non-flammable <input type="checkbox"/> explodable <input checked="" type="checkbox"/> non-explodable		
Flashpoint: <input checked="" type="checkbox"/> open cup <input type="checkbox"/> closed cup 115°C	Flammable limits in air-% Vol upper : NK lower : 3.2 (EG)	Autoignition temp. 400°C (EG)
Fire Extinguishing Agents : <input checked="" type="checkbox"/> water <input checked="" type="checkbox"/> CO ₂ <input checked="" type="checkbox"/> foam <input checked="" type="checkbox"/> chemical powder		
Decomposition products/special fire hazards: Very toxic fumes of NO _x and Cl are produced when TYLLANEX is heated to decomposition.		Special fire fighting procedures: Self-contained breathing apparatus and total protection required in enclosed areas. Cool containers with a water spray.

ENVIRONMENT

Ecological effects : Terbutylazine is of low toxicity in soil. It is moderately persistent (½ life = 2-6 mos). Degradation is primarily microbial. Terbutylazine is of low to moderate toxicity to fish, non-toxic to bees when used according to instructions.

HEALTH & TOXICOLOGY

Symptoms of exposure(human) : No reported cases of poisoning in man.

FIRST AID	
If inhaled:	Remove to fresh air. Assist breathing if needed. Get medical attention.
If in eyes:	Flush eyes with plenty of water for 15 minutes, holding eyelids open if necessary.
If on skin:	Remove contaminated clothing. Wash affected area with plenty of soap and water. Wash clothing before reuse.
If swallowed:	Give a slurry of activated charcoal in a glass of water. Get medical attention. Never give anything by mouth to an unconscious person.
Note to the Physician: If ingested: (1)gastric lavage (2)emetic or alkaline catharsis. There is no antidote. Treat symptomatically.	

TOXICOLOGY DATA	Other data
Acute oral: LD ₅₀ (rat) = 1,189 mg/kg	
Acute dermal: LD ₅₀ (rat) > 2,000 mg/kg	
Acute inhalation: LC ₅₀ (rat) > 5.76 mg/L @ 4 h	
Primary eye irritation: non-irritant in rabbit	
Primary skin irritation: non-irritant in rabbit	
Skin sensitization: non-sensitizer in guinea pig	

NA = not applicable

NK = not known

**STORAGE
&
STABILITY**

Hazardous reactions: TYLLANEX SC is neither an oxidizing or reducing agent. Not subject to polymerization.	
Recommended storage conditions: In original containers away from direct heat and out of direct sunlight.	Stable for 2 yrs.
Precautions: Observe good work practices when handling TYLLANEX SC.	

**PROTECTIVE
EQUIPMENT**

Ventilation: exhaust fan Safety goggles: mandatory Dusk mask: optional Face shield: recommended Impervious gloves (PVC,nitrile): mandatory Coveralls: recommended Impervious boots or shoes: recommended	Additional requirements Use a cartridge-type respirator in absence of adequate ventilation. Wash clothing before reuse.
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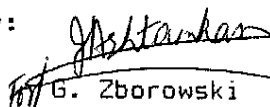
**EMERGENCY
ACTION**

Spillage : Cleanup personnel should wear appropriate protective clothing. Contain spill in smallest area practical. Absorb liquid with sawdust or other absorbent for disposal together with broken or empty containers.
Fire : Follow established procedures. Do not inhale smoke or vapours.

Disposal : Wastes and contaminated material from minor spills may be disposed of in landfill approved for pesticide use. Larger quantities must be disposed of in accordance with local and national regulations (e.g., chemical incinerator equipped with scrubbers).

**PRECAUTIONARY
STATEMENTS**

TYLLANEX SC may be harmful if swallowed, inhaled or absorbed through skin. May irritate eyes and skin. Wash thoroughly after handling. Do not eat, drink or smoke when working with TYLLANEX SC. Store away from foodstuffs. Avoid contamination of water, food and feedstuff. Do not discharge into bodies of water or onto wetlands.

This Material Safety Data Sheet is based on currently available data. The appropriate conditions for the safe use of the product remain the responsibility of the user. No warranty regarding the product's properties is implied by the above data.	Date of issue: 16th April 1993(3720M01.G)
	Prepared by:  G. Zborowski