

MATERIAL SAFETY DATA SHEET

COMPANY DETAILS:

Syngenta Crop Protection Limited
Tower II, Level 7, 110 Symonds Street
Private Bag 92618,
Symonds Street
AUCKLAND
NEW ZEALAND

Telephone No.: (weekdays) 09 - 306 1500
National Poisons & Hazchem
Information Centre : 0800 POISON
(0800 764 766)
Emergency No. (24 Hours) 0800 734 607

IDENTIFICATION

PRODUCT NAME: MODDUS[®]

Formulation type:	Emulsifiable concentrate	Dangerous Goods Class/	9
Active Ingredients:	trinexapac-ethyl,	subsidiary risk:	
Product Code No.:	A-7725M	Hazchem Code:	2X
Chemical type:	cyclohexadione	Packaging Group:	III
UN Number:	3082	Toxic Substances Schedule:	None allocated
		Marine Pollutant	No

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
(CONTAINS TRINEXEPAC ETHYL 25%)

USE: A plant growth regulator to reduce the risk of lodging in wheat, barley and oats and promote seed yield increases in ryegrass seed crops.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance:	Yellow –red- brown liquid	Flash Point:	79°C
Odour:	unpleasant Pungently sweet	Flammability:	Non flammable
Vapour pressure:	No data	Combustibility:	Combustible – C1
		Behaviour in water:	Emulsifiable

OTHER PROPERTIES

Viscosity:	10.01 +/- 0.12 mPa*s at shear rate D = 2.19<D<10.15 sec ⁻¹	Corrosiveness:	Not corrosive
Volatility:	No data	pH:	2-6 as 1% suspension
Density:	0.98-1.0g/cm ³	Thermal sensitivity:	Not thermally sensitive
Auto ignition temp:	250°C		

INGREDIENTS -

	CAS No.	Content (% w/v)
trinexapac-ethyl	95266-40-3	250 g/L
fatty acid methylester ME C 6-12	67762-39-4	Max 450 g/l
isotridecanol-6-ethoxylate	9043-30-5	214 g/l
ingredients determined to be not hazardous		up to 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

Toxicity

- This product is slightly hazardous (WHO Hazard Class III)

Swallowed: **LOW TOXICITY**

Tests on rats indicate a low toxicity following single doses of the undiluted product.
(LD₅₀ >5000 mg/kg)

Dermal **LOW TOXICITY**

absorption: Tests on rats indicate a low toxicity due to skin contact with the undiluted product.

(LD₅₀ >4000 mg/kg)

Inhaled: **LOW TOXICITY**
Tests on rats using a similar formulation indicate a low toxicity due to inhalation.
(LC₅₀ (4 h) > 5,140 mg/m³)

Irritation

Eye: **NON IRRITANT**
Skin: **NON IRRITANT**

Sensitisation - (guinea pigs) -

Skin: **SENSITISER**

Poisoning symptoms: No case of human poisoning is on record.

CHRONIC (Active Ingredient)

Trinexapac-ethyl technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre.

Swallowed: If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed DO NOT induce vomiting. Give a glass of water. Begin artificial respiration if victim is not breathing. Use mouth to nose rather than mouth to mouth.

Eye: Avoid contact with eyes. If product gets in eyes wash it out immediately with water.

Skin: May cause sensitization by skin contact. Avoid contact with skin. If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water.

Inhaled: Move person to fresh air and keep at rest until recovered.

ADVICE TO DOCTOR

No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

Exposure Potential -

Re-entry Period - Under field conditions the spray should be allowed to dry on the foliage before re entry into treated areas.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Harmful if inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When opening the container and preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. 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 and face shield or goggles and contaminated clothing.

FLAMMABILITY

This product is NON FLAMMABLE. Product is combustible (C1)

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store away from sun and damp, in original tightly closed containers, in well ventilated area apart from food or feed.

Avoid storage in temperatures below 5°C and above 35°C.

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Procedure for spill:

Remove heavily contaminated soil layer and bury in a safe place away from water supplies.

- (1) Keep all bystanders away.
- (2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Dispose of the absorbed material will depend upon the extent of the spill.
 - For quantities up to 50L of product bury in a secure landfill site.
 - For quantities greater than 50L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) 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.
- (d) Burning of empty containers if circumstances, especially wind conditions, permit is an alternative method.

FIRE/EXPLOSION HAZARD

This product is combustible. Extinguish warehouse and factory fires using fine-water spray, CO₂, powder or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

OTHER INFORMATION

Harmful to aquatic organisms. LC₅₀-96hr: rainbow trout 68 mg/L; carp 57 mg/L; bluegill sunfish > 130 mg/L. LC₅₀ Daphnia magna >142.5 mg/L. Non toxic to birds, bees and soil organisms. LD₅₀ mallard ducks > 2,000mg/kg; LD₅₀ bobwhite quails > 5,200 ppm; 48 hr LC₅₀ bee (contact) > 115.4 µg/bee.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT:	Business Manager - Crop Protection	(09) 306 1500
	24 HOURS EMERGENCY CONTACT:	0800 734 607

This Material Safety Data Sheet summarises 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.