

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of NOHSC

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited
ABN 33 002 933 717
140-150 Bungaree Rd.,
PENDLE HILL, NSW, 2145

Telephone No.: (02) 9688 0444
24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: TOPIK[®] 240 EC Selective Herbicide

Formulation type:	emulsifiable concentrate	UN Number (ADG):	3082
Active Ingredients:	- clodinafop-propargyl - cloquintocet-mexyl	Dangerous Goods Class/ and Subsidiary Risk (ADG):	9 none allocated
Product Code No.:	A-8588C	Hazchem Code:	2X
Chemical types:	- carboxylic acid derivative - quinoline derivative	Packing Group:	III
		Poisons Schedule:	6

USE: Herbicide for the control of wild oats, paradoxa grass, canary grass and annual ryegrass in wheat.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance:	Light to dark brown liquid	Flash Point:	>70°C (closed cup)
Odour:	Aromatic solvent odour	Flammability:	Non-flammable
Specific gravity:	1.06 – 1.10 g/cm ³ (at 20°C)	Behaviour in water:	Emulsifiable
Melting point:	< - 10°C		

OTHER PROPERTIES

Viscosity:	22.67 mPas at 20°C	Combustibility:	combustible
Surface tension:	34.0 – 34.4 mN/m	Explosive properties:	Not explosive
Corrosiveness:	Not corrosive	pH (1% deion. water):	4 - 8

INGREDIENTS -

	CAS No.	Content (% w/v)
clodinafop-propargyl (technical grade)		>24
to give clodinafop-propargyl	[105512-06-9]	24
cloquintocet-mexyl (technical grade)		>6
to give cloquintocet-mexyl	[99607-70-2]	6
N-methyl pyrrolidone	[872-50-4]	<10
alkylbenzene sulphonate	-	<10
epoxidised vegetable oil	-	<10
alcohol ethoxylates	-	<10
aromatic hydrocarbon mixture	[64742-94-5]	30-60
other ingredients determined not to be hazardous		<10

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

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

Swallowed:

LOW TOXICITY

Tests on rats using an almost identical Topik 240 EC formulation indicate low toxicity following single oral doses of the undiluted product.
(LD₅₀ > 2,276 mg/kg)

Dermal

absorption:

LOW TOXICITY

Tests on rats using an almost identical Topik 240 EC formulation indicate low toxicity due to skin contact with the undiluted product.
(LD₅₀ > 4,000 mg/kg)

Inhaled:	LOW TOXICITY Tests on rats using a similar Topik 240 EC formulation indicate low toxicity due to inhalation of the undiluted product. (LC ₅₀ (4 h) > 3,500 mg/m ³)
Irritation -	(Based on studies with rabbits)
Eye:	MODERATE IRRITANT
Skin:	MODERATE IRRITANT
Skin Sensitisation -	(Based on test with guinea pigs using an almost identical Topik 240 EC formulation) POTENTIAL SKIN SENSITISER (ie contact allergenic material)

CHRONIC

Clodinafop-propargyl technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained. **Clodinafop-propargyl technical** induced liver toxicity and benign and malignant liver tumours in mice fed high daily doses over their lifetime. Rats fed high doses showed mild liver toxicity but did not develop tumours while no liver effects were observed for dogs fed high doses. The liver tumour finding occurring at high doses is believed due to **clodinafop-propargyl** inducing proliferative effects genetically pre-existing in mice and has no relevance to humans because the cellular changes which underlie it are rodent-specific and have been shown experimentally not to occur in primates.

Cloquintocet-mexyl technical has been extensively tested and no evidence of mutagenic, carcinogenic, teratogenic, or reproductive effects was obtained.

The **aromatic hydrocarbon mixture** may cause central nervous system depression and narcosis.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.

Swallowed:	If swallowed and if more than 15 minutes from a hospital, induce vomiting preferably using Ipecac Syrup (APF).
Eye:	If product gets in eyes, wash it out immediately with water. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water.
Inhaled:	Move affected person to fresh air and keep at rest until recovered.

ADVICE TO DOCTOR

No specific antidote exists. Treat symptomatically.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

The manufacturer of the **aromatic hydrocarbon mixture** recommends an occupational exposure limit of 100 ppm total hydrocarbon. This level is unlikely to be reached under normal usage of this product. No other exposure standards have been set for the components of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Skin uptake of **clodinafop-propargyl technical** and **cloquintocet-mexyl technical** can occur. Inhalation of spray mist is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

Re-entry Period - Do not enter treated areas without protective clothing until the spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Harmful if swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid inhaling spray mist. Avoid contact with eyes and skin.

When opening the container, preparing spray and using product, wear:

- cotton overalls buttoned to the neck and wrist,
- a washable hat,
- elbow-length butyl rubber gloves and
- face shield or goggles.

If product gets on skin, immediately wash area with soap and water. If product gets in eyes, wash it out immediately with 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, face shield or goggles and contaminated clothing.

FLAMMABILITY

This product is NON-FLAMMABLE. Product is combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in tightly sealed original containers in a dry secure place away from fertilisers, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Transport Classification – Sea (IMDG):

UN No:	3082	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS
Class:	9		SUBSTANCE, LIQUID, N.O.S.
Packing Group:	III	Additional information:	SOLVENT NAPHTHA AND CLODINAPOP-PROPARGYL 24%, MARINE POLLUTANT

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:

- (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 leakage.
- (4) Dam and absorb spill with an absorbent material (eg. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal 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 50 L 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 spill area using hydrated lime.

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank mix. 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. Empty containers and product should not be burnt.

FIRE/EXPLOSION HAZARD

This product is non-flammable and non-explosive. The product may burn if involved in a fire. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator. Do not allow fire-water to enter drains.

OTHER INFORMATION

Clodinafop-propargyl technical is practically non-toxic to birds, crustaceans, earthworms, soil microorganisms and bees, and highly toxic to fish [LC₅₀ (96 h) = 0.4 mg/L for rainbow trout]. The formulated product is moderately toxic to fish and aquatic invertebrates [LC₅₀ (96 h) = 4.9 mg/L for trout].

Cloquintocet-mexyl technical is practically non-toxic to birds, fish, crustaceans, earthworms, soil microorganisms and bees.

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 Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - Crop Protection - (02) 9688 0444 24 HOURS EMERGENCY CONTACT: 1 800 033 111

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.

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Acknowledgments:

Collated by HerbiGuide. Phone 08 98444064 for more information.