ARAB REPUBLIC OF EGYPT

MINISTRY OF AGRICULTURE AND

LAND RECALMATION

AGRICULTURAL

PESTICIDE COMMITTEE

Technical Data Sheet

For Experimentation

Shardzan 48% SL

*All Papers Must Be Stumped

INTRODUCTION

Common Name:	**Bentazone 48% SL**
Use:	**Herbicide**

Company Name:	**:**	**Sharda world wide export puut**
Situation	**:**	
Nationality	**:**	**India**
Address	**:**	**Domnic Holm 29 Rood Bandra, Mumbai**
Remarks	**:**	

APPLICANT

Name:	**:**	**International center for marketing - ICM**
Address	**:**	**34 mahmoud khairy st. – nasr city - cairo**
Nationality	**:**	**EGYPTIAN**
Tel.	**:**	**24045740 - 24054744**
Authority cert.	**:**	
Identity cert.	**:**	
Remarks	**:**	

Chemistry Of The Product

SYNONYMS

Common Name	**:**	**Bentazone**
Code Number	**:**	**25057-89-0**
Trade Name	**:**	**Shardzan 48% SL**

Initial Regist.	**:**	
Chemical Class	**:**	**Bentazothiadiazinone**
Local Synonyms	**:**	

Chemical Name:	**3- (1-methylethy1) – 1H -2,1,3- benzo thiadiazin -4 (3H) – ohe 2,2-dioxiole**

Structural Formula:	

Physical and Chemical Prosperities:

Molecular Weight	**:**	**240.3**
Physical Form	**:**	**Liquid**
Technical Purity	**:**	**95%**
Vapour Pressure	**:**	**N/A**
Colour & Odour	**:**	**Homogeneous liquid**
M.P Or b.p	**:**	**N/A**
Density	**:**	**N/A**
Solubility	**:**	**In water 570 mg/L (PH7) 20'c**
Octanol Number	**:**	**N/A**

Type of Formulations and Specifications

CONTENTS	TYPES OF FORMULATIONS		
	SL		
ACTIVE INGREDIENT	48%		
INERT INGREDIENT	52%		

SPECIFICATIONS OF FORMULATIONS:

Appearance	:	Homogeneous liquid
Alkalinity or Acidity	:	N/A
Suspensibility	:	-----
Emulsification Prosperities	:	-----
Density	:	N/A
Viscosity	:	N/A
Flash Point	:	N/A
Freeze Point	:	N/A
Wettability	:	N/A
Practice Size	:	N/A
Compatability	:	N/A
Heat Stability	:	Decomposition Temperature 200'c
Storage Stability	:	Stable at normal storage condition
Mixing Prosperities	:	N/A
Methods of Analysis	:	Rplc with uv detection (AOAC methods, 1995,993,02,7.4.2)
Levels of Impurities	:	N/A

Biological Spectrum

Pesticidal efficacy (list of pests):

Contact herbicide controlling anthemis, chamomilla, matricaria and chrysanthemum.

Mode of Action:

Selective contact herbicide, absorbed mainly by the foliage, also absorbed by the roots.

Uses and Recommendations:

Target Pest	CROP	APPLICATION RATE / FADDAN	APPLICATION METHOD
Broad leaves weeds	rice	1.5 liter/ faddan	spraying

Phytotoxicity: **Non – phytotoxic when used as recommended**

Toxicological Studies

Acute Mammalian Toxicity:

Acute Toxicity	ANIMAL	LD 50mg/Kg body weight	
		Technical	Form
Oral	Rat	>1000 mg/kg	1,100to2,063mg/kg
Dermal	Rabbit	>2500 mg/kg	4000 mg/kg
Inhalation (mg/m^3/2H)	Rat	>5.1 mg/L (4h)	

Symptoms: **EYE:** moderately irritating

SKIN: moderately irritating

WHO Classification	Toxicity Category			Label Signal Word		
	High I	Mod II	Low III	Danger	Warning	Caution
Techn.			√			√
Form			√			√
Impurities						

Chronic Toxicity

Carcinogenicity (WHO – IARC)

Non carcinogenicity

Delayed neurotoxicity (WHO)

N/A

Hormonal disruption (WHO)

N/A

Tratogenicity & Reproduction (WHO)

Non tratogenicity and Reproduction

Mutagenicity (WHO)

Non mutagenicity

Acceptable Daily Intake (ADI)

0.1 mg/kg b.w

Pre – Harvest Interval (PHI) 2 days

ECOTOXICOLOGY

1- **Aquatic Organism**

Yainbow trout is 510 mg/L

2- **Earthworms**

N/A

3- **Honey bees**

Not Toxic to bees

4- **Birds**

Mallard ducks 720 mg/ kg

5- **Parasites and Predators**

LC50 (48h) Dophnia 125 mg/ L

Environmental Chemistry

Fate in soil:

In soil, short-lived hydroxyl compounds are first formed, wich rapidly undergo further degradation.

Effect on Microbial Process: N/A

Methods of Res. Analysis: gc with ECD (AOAC methods, 1995,992,33,10.7.03

Fate in Plants:

Rapidly metabolized to derivatives

Fate in Water: N/A

Toxicity to aquatic organs:

Rate of hydrolysis at PH levels:

Photo degradation Rate:

Methods of Analysis:

Fate in Animal: Metabolism studies in three different species should that bentazone was only poorly metabolized, the parent compound being the predominant product, only small amounts of hydroxylated bentazone metabolites could be detected.

Safety Handling Storage and Disposal

Storage:

Store the material in a well- ventilated, secure area out of reach of children and domestic animals . don't store food, beverage or tobacco products in the storage area.

Shelf Life: **N/A**

Handling Precautions:

Wash thoroughly with soap water after handling.

Containers (Lining): **N/A**

Signs and Symptoms of Over Exposure: **exposure levels are not known, under any other circumstances where air – purifying respirators may not provide adequate protection.**

Note to Physician: **if poisoning is suspected, immediately contact aphysicain, the nearest hospital tells the person contacted the complete product name.**

FIRST AID:

IF Swallowed. Give a large quantity of water to drink and induce vomiting

IF In eyes. Immediately rinse with a large amount of running water.

IF On Skin. Wash with plenty of soap and water.

IF Inhaled move victim from contaminated area to fresh air.

ANTIDOTE: **there is no specific anti date. Treat symptomatically**

REMARKS: