



Material Safety Data Sheet

1.Product identification

Pesticide Name:Dazomet 98%TC

Active Ingredient:Dazomet

Chemical Name:3,5-dimethyl-1,3,5-thiadiazinane-2-thione;tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thione (IUPAC)

Manufacture:Unilong Industry Co.,Ltd.

No.2000 Shunhua Rd, High-Tech Zone, Jinan City, Shandong Province, China

2. Composition/Information On Ingredients

Composition	CAS No.	Content %
Dazomet	533-74-4	98%
Warter	7732-18-5	2%

3.Hazards Identification

SUSMP Classification:S6

ADG Classification:Class 9:Miscellaneous dangerous goods.

UN Number:3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID,N.O.S.



GHS Signal word:WARNING.

Acute Toxicity Oral-Category 4

Skin Corrosion/Irritation-Category 2

Serious Eye Damage/Eye Irritation-Category 2B

Specific Target Organ Toxicity-Single Exposure-Category 3

Hazardous to Aquatic Environment Short Term/Chronic-Category 1

HAZARD STATEMENTS:

H302:Harmful if swallowed.

H315:Causes skin irritation.

H320:Causes eye irritation.

H335:May cause respiratory irritation.

H410:Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

PREVENTION

P102:Keep out of reach of children.

P261:Avoid breathing fumes,mists,vapours or spray.

P262:Do not get in eyes,on skin,or on clothing.

P264:Wash contacted areas thoroughly after handling.

P270:Do not eat,drink or smoke when using this product.

P271:Use only outdoors or in a well ventilated area.

P273:Avoid release to the environment.

P280:Wear protective gloves,protective clothing and eye or face protection.

RESPONSE

P362:Take off contaminated clothing and wash before reuse.

P301+P312:IF SWALLOWED:Call a POISON CENTER or doctor if you feel unwell.

P301+P330+P331:IF SWALLOWED:Rinse mouth.Do NOT induce vomiting.

P302+P352:IF ON SKIN:Wash with plenty of soap and water.

P304+P340:IF INHALED:Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338:IF IN EYES:Rinse cautiously with water for several minutes.Remove contact lenses,if present and easy to do.Continue rinsing.

P332+P313:If skin irritation occurs:Get medical advice.

P337+P313:If eye irritation persists:Get medical advice.

P391:Collect spillage.

P370+P378:In case of fire,use carbon dioxide,dry chemical,foam,water fog.

STORAGE

P405:Store locked up.

P402+P404:Store in a dry place.Store in a closed container.

P403+P235:Store in a well-ventilated place.Keep cool.

DISPOSAL

P501:Dispose of contents and containers as specified on the registered label.

Major Health Hazards:irritating to eyes,respiratory system and skin,harmful if swallowed.

4.First Aid Measures

Skin:In case of contact,immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Eyes:In case of contact,immediately flush the eyes with large quantities of running water for a minimum of 15 minutes.Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water.

Ingestion: If swallowed,wash out mouth with water provided person is conscious.Induce vomiting.Obtain medical attention immediately.

Inhalation: Remove victim to fresh air.If not breathing,give artificial respiration.If breathing is difficult,give oxygen.Consult medical personnel.

5.Fire-Fighting Measures

Extinguishing media

To be used:water spray,foam,dry chemical powder and carbon oxide.Don't use:not applicable

Particular risk:none.

Measures of personal protection:safety glasses or goggles,rubber gloves,shoes plus socks,long-sleeved shirt,and long pants.

6.Accidental Release Measures

Steps to be taken in case material is released or spilled:

Evacuate area.Wear self-contained breathing apparatus,rubber boots and heavy rubber gloves.Soak up material with absorbent material and dispose of in accordance with local regulations.Ventilate area and wash spill site after material pickup is complete.

Disposal Method:

Cautiously dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

7.Handling And Storage

Handling:Keep out of reach of children.Avoid contact with the eyes,skin and clothing and avoid inhalation of product or spray mist.If in eyes,wash it immediately with water.After handling and before eating,drinking or smoking,wash hands,arms and face thoroughly with soap and water.Do not contaminate food or use on household tanks.

Storage:Store in the closed,original container in a dry,cool,well-ventilated area,secure area at minimum storage temperatures.Store in locked room or place away from children,animals,food,animal feed,seed and fertilizers.

8.Exposure Controls/Personal Protection

Respiratory equipment:AS/NZS 1715,Protective Gloves: **AS2161**, Occupational Protective Clothing:ASNZS 4501 set 2008,Industrial Eye Protection:AS1336 and AS/NZS 1337,Occupational Protective Footwear:

AS/NZS2210.

SWA Exposure Limits:TWA(mg/m³)STEL(mg/m³)

Protective Clothing Skin contact should be prevented through the use of impervious gloves,footwear,long-sleeved clothing,wide brimmed hat and head covering.Remove contaminated work clothing and launder after each shift. Workers should shower at the end of each shift.Work clothing should be laundered separate from other garments.

Eye Protection Eye contact with the material should be avoided through the use of chemical safety glasses,goggles or a face shield,selected in regard to exposure potential.

Other Protection An adequate supply of clean potable water should be available to allow thorough flushing of skin and eyes in event of contact with these compounds.

9.Physical and Chemical Properties

Mol.wt.:162.3

Molecular formula:C₅H₁₀N₂S₂

Form:Colourless crystals.

Odour:sulfurous odour.

pH:Not available.

Melting Point:104-105°C

Vapour pressure:0.58 mPa(20°C);1.3 mPa(25°C)

Kow:logP=0.63(pH 7)

Henry:2.69×10⁻⁶Pa m³ mol⁻¹

S.g./density:1.36g/cm³at 20°C

Solubility:In water 3.5 g/l(20°C).In cyclohexane 400,chloroform 391,acetone 173,benzene 51,ethanol 15, diethyl ether 6(all in g/kg,20°C).

Stability:Stable at temperatures up to 35 °C.Sensitive to temperatures >50 °C,and to moisture.Aqueous hydrolysis DT506-10h(pH 5),2-3.9h(pH 7),0.8-1h(pH 9)(all 25°C)(FAO Specifications).

10.Stability and Reactivity

Reactivity:No significant decomposition products.Hydrolyses in acidic media to carbon disulfide,formaldehyde and methylamine.In damp soil,this product decomposes to methyl(methylaminomethyl)dithiocarbamic acid which in turn degrades to methyl isothiocyanate,formaldehyde,hydrogen sulfide and methylamine.

Conditions to Avoid: Protect this product from light.Store in the closed original container in a dry,cool,well-ventilated area out of direct sunlight.

Incompatibilities:water,acids,bases,strong oxidising agents.



Fire Decomposition:Carbon dioxide,and if combustion is incomplete,carbon monoxide and smoke.Nitrogen and its compounds,and under some circumstances,oxides of nitrogen.Occasionally hydrogen cyanide gas in reducing atmospheres.Water.Carbon monoxide poisoning produces headache,weakness,nausea,dizziness,confusion, dimness of vision,disturbance of judgment,and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

11.ToxicologicalInformation

Oral:Acute oral LD₅₀ for rats 519mg/kg.

Skin and eye:Acute percutaneous LD₅₀ for rats>2000 mg/kg.DP formulation is a skin and eye irritant(rabbits). A.i.is not a skin or eye irritant(rabbits).Not a skin sensitiser(guinea pigs).

Inhalation:LC₅₀(4h)for rats 8.4 mg/l air.

NOEL: NOAEL(90 d)for rats 1.5 mg/kg b.w.daily;(1y)for dogs 1 mg/kg b.w.daily;(2y)for rats 0.9 mg/kg b.w.daily.Not teratogenic or carcinogenic.

ADI/RfD: (BfR)0.015 mg/kg b.w.[2005];(EPA)0.0035 mg/kg b.w.[1993];(Kanesho Soil proposed)0.009 mg/kg b.w.

Other:Not oncogenic,mutagenic or clastogenic.

Toxicity Class:WHO(a.i.)II;EPA(formulation)II

EC classification:Xn;R22|Xi;R36|N;R50,R53

12.Ecological and EcotoxicologicalInformation

Birds:LD₅₀ for bobwhite quail 415mg/kg b.w.LC₅₀ for bobwhite quail 1850,mallard ducks>5000 mg/kg diet.

Fish:LC₅₀(96h)for rainbow trout 0.16mg/l.

Daphnia: EC₅₀(48 h)0.3 mg/l.

Algae:EC₅₀(96h)for Scenedesmus subspicatus 1.0 mg/L.

Other aquatic spp.:EC₁₀(17h)for Pseudomonas putida 1.8mg/l.

Bees:Not toxic to bees when used as directed.LD₅₀(oral)>10µg/bee;(contact)>50µg/bee.

Worms: Toxic to worms(used as a soil sterilant).

13.Disposal Considerations

Product:do not reuse product containers.Dispose of product containers,waste containers,and residues according to local,state and environmental regulations.

14.Transport Information

ADG Code:3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID,N.O.S.

Hazchem Code:2Z

Special Provisions: 179,274,AU01

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.

Dangerous Goods Class:Class 9:Miscellaneous Dangerous Goods.

Packaging Group:III

Packaging Method:P002,IBC08,LP02

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1(Explosives).

15.Regulatory Information

AICS:This product is compliant with NICNAS regulations.

The following ingredient:Dazomet,is mentioned in the SUSMP.

16.Other Information



Unilong Industry Co., Ltd

Add: No.2000 Shunhua Rd, High-Tech Zone , Jinan City, Shandong Province, China

All information and instructions provided in this Material Safety Data Sheet(MSDS)are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct.This information applies to the product as such.In case of new formulations or mixes,it is necessary to ascertain that a new danger will not appear.It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use,handle, dispose or in any way come in contact with the product.If the recipient subsequently produce formulations containing this product,it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.