MATERIAL SAFETY DATA SHEET

ACHIEVE 40 DG

MSDS No. US006014_01
Version: 1 Date issued: 10/19/98 Date printed: 10/20/98

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company : Zeneca Agricultural Products

1800 Concord Pike Wilmington DE 19850

Phone number : (302) 886-1000

Emergency phone : Medical: 800-327-8633 (1-800 FASTMED)

Chemtrec: 800-424-9300 Technical:302-886-3000

Name used on label : ACHIEVE 40 DG

A Registered Trade Mark of Zeneca Agricultural Products

Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Identity CAS-no. Typical % Other information

TRALKOXYDIM TECHNICAL DRY

87820-88-0 40 %

Other Ingredients:

60 %

TALC

14807-96-6

Ingredients not precisely identified are proprietary or non hazardous. Values are not product specifications.

Section 3 – HAZARDS IDENTIFICATION

Physical hazards:

This material burns vigorously.

Health hazards:

Irritant (skin, eye, respiratory passages).

Section 4 – FIRST AID MEASURES

IF IN EYES:

Immediately flush with plenty of water for at least 15 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

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IF ON SKIN:

Wash material off the skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention.

IF SWALLOWED:

Provided the patient is conscious, give 1 or 2 glasses of water to drink. Immediately contact Zeneca's Emergency Information Network at 1-800-F-A-S-T-M-E-D (327-8633). Vomiting should only be induced under the direction of a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water. Immediately transport victim to an emergency facility.

IF INHALED:

Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel.

Section 5 – FIRE FIGHTING MEASURES

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Flash point :
    Not applicable.
Autoignition temperature :
    No data.
Flammable limits (STP) :
    Not applicable.
EXTINGUISHING MEDIA:
    Water fog, alcohol foam, carbon dioxide, dry chemical, halogenated agents.
PROTECTIVE EQUIPMENT:
    Self-contained breathing apparatus with full facepiece and protective
    clothing.
NFPA RATING
Health
    2
Fire
    0
Reactivity
    0
Unusual fire and explosion hazards:
    This product may form explosive dust clouds in air.
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Section 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Steps to be taken in case material is released or spilled:
Make sure all personnel involved in the spill cleanup follow good
industrial hygiene practices. A small spill can be handled routinely. Use
adequate ventilation and wear an air-supplied respirator to prevent
inhalation. Wear suitable protective clothing and eye protection to prevent
skin and eye contact.

METHODS FOR CLEANING UP:

Do not allow the material to enter streams, sewers or other waterways. Sweep up spilled material being careful not to create dust. Shovel into the open drum.

Generously cover the contaminated areas with common, household detergent (e.g. TIDE, registered trademark of Proctor & Gamble Co.). Using a stiff brush and small amounts of water, work the detergent into the remaining spilled material forming a slurry. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes. Be careful to completely avoid skin or eye contact. Do not splatter on oneself or bystanders. Spread absorbent on the slurry liquid and shovel mixture into the open drum

Rinse with small amount of water and use absorbent to collect the wash solution. Shovel into the open drum.

Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan. Otherwise, in case of emergency call, day or night, 800-424-9300, Chemtrec.

Section 7 - HANDLING AND STORAGE

REQUIREMENTS FOR STORAGE ROOMS:

Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Keep away from heat, sources of ignition and direct sunlight. Exercise due caution to prevent damage to or leakage from the container.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

ACGIH TLV TALC

(Respirable Dust)

TWA 2 mg/m³

OSHA PEL TALC

TWA 20 mgpcf

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TLV or suggested control value:

No ACGIH TLV or OSHA PEL assigned. Control of exposure to below the PEL for the ingredients (see Section 2) may not be sufficient. Minimize exposure in accordance with good hygiene practice. Zeneca operates its facilities such that employee exposure to the active ingredient is limited to below 1.5 mg/m3 8-hour TWA.

ENGINEERING CONTROLS:

This product is intended for use outdoors where engineering controls are not necessary. If use conditions are different (e.g. product reformulation or repackaging), use ventilation adequate to maintain safe levels.

EYE PROTECTION:

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

BODY PROTECTION:

This product is FIFRA regulated. Refer to product labeling for end-user Personal Protection requirements. Skin contact should be prevented through the use of impervious gloves, footwear, long-sleeved clothing, and wide brimmed hat. Remove contaminated clothing and wash before rewearing. Wash separately from other laundry.

RESPIRATORY PROTECTION:

If needed, use MSHA-NIOSH approved respirator for pesticides.

Other protective equipment:

An adequate supply of clean potable water should be available to allow thorough flushing of skin and eyes in event of contact with this compound. Special precautions or other comments:

Follow procedures specified in the National Fire Protection Association Codes and Standards for handling combustible dusts. Prevent skin and eye contact with this material. Observe OSHA PEL limitations. Avoid breathing particulates.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form : granules
Color : aqua blue
Odor : None
Melting point : No data.
Vapor Pressure :

at 20 °C

Method: mmHg

 $3 \times 10^{\sim} (-9)$ for technical material

Vapour density : No data.

(air = 1)

Bulk density : 550 g/l

at 25 °C

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Specific gravity: : 0.724

Solubility : dispersible in/with water

pH-value (quant.) : 5.9

1% w/w dilution in deionized water

Volatile by volume: :

Negligible

Section 10 – STABILITY AND REACTIVITY

HAZARDOUS REACTIONS (CONDITIONS TO AVOID)

Stability:

Stable under normal conditions. Combustible under fire conditions.

Incompatibility:

Strong oxidizing agents. Hazardous polymerization:

Will not occur.

Conditions to avoid:

Formation of dust clouds. High temperatures, sparks, open flames.

HAZARDOUS DECOMPOSITION PRODUCTS

Combustion or thermal decomposition will evolve toxic and irritant vapors.

Combustion products: carbon dioxide, carbon monoxide, nitrogen oxides,

ammonia.

Section 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

LD50 Ingestion rat

Dose : > 5000 mg/kg

Additional inform. : A single dose of this product is classified as

"slightly toxic" by ingestion.

LC50 Inhalation rat

Dose : > 3.7 mg/l

Additional inform. : Exposure to high concentration of vapors or aerosols of

this material can irritate mucous membranes. This material is classified as "moderately toxic" by

inhalation.

LD50 Skin absorption rat

Dose : > 2000 mg/kg

Additional inform. : This material is classified as "moderately toxic" by

absorption.

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Dermal

Additional inform. : This material may cause mild irritation. Repeated

and/or prolonged contact may cause dermatitis.

ACUTE TOXICITY (IRRITATION, SENSITIZATION ETC.)

Eye contact

Additional inform. : This material may cause mild irritation, redness and

possible damage due to the abrasiveness of this

granular material.

GENERAL INFORMATION ABOUT ACUTE OR OTHER TOXICITIES General information

This description of toxicological properties is based on experimental results and experience with the material.

Other effects of overexposure:

The ingredient(s) of this product is (are) not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA and not listed as carcinogens by NTP. The active ingredient had no adverse effect on fertility or growth of offspring in a multigeneration reproduction study in rats. The active ingredient is not mutagenic in any of a number of in-vitro and in-vivo assays for mutagenesis. The active ingredient has produced birth defects in rats fed high doses. No adverse effects are expected due to occupational exposure levels.

Section 12 – ECOLOGICAL INFORMATION

ADDITIONAL INFORMAION ABOUT ECOLOGY

This material is toxic to fish and wildlife.

Section 13 – DISPOSAL CONSIDERATIONS

Disposal Method:

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute or make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

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Section 14 - TRANSPORT INFORMATION

TRANSPORT/ADDITIONAL INFORMATION

Not Classified as Dangerous for Transport.

Section 15 – REGULATORY INFORMATION

HAZARDOUS INGREDIENTS TALC

Other regulations, restrictions and prohibitions

TSCA (Toxic Substances Control Act) Regulations, 40CFR 710:

This product is a pesticide and is exempt from TSCA regulation.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

EPA

EPA Registration no.: 10182-

Section 16 – OTHER INFORMATION

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

This information is intended solely for the use of individuals trained in the particular hazard rating system.

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obtained or arising from any use of the product or reliance on such information.

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