



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont
Material Safety Data Sheet

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DPX-H6573-323
M0000240 Revised 10-JUL-2001

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Tradenames and Synonyms

"PUNCH" 40 EC
"PUNCH" B

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.
302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.
703-527-3887)
Medical Emergency : 1-800-441-3637 (outside the U.S.
302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
FLUSILAZOLE (1-[[BIS(4-FLUOROPHENYL)METHYLSILYL]METHYL]- 1H-1,2,4-TRIAZOLE)	85509-19-9	40
INERT INGREDIENTS (INCLUDES PERCENTAGES OF THE FOLLOWING:)		60
* XYLENES (mixed isomers)	1330-20-7	<5

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

CAUTION! Causes eye irritation. Harmful if swallowed or absorbed through the skin.

AMIMAL DATA:

(HAZARDS IDENTIFICATION - Continued)

Oral LD50 (rat): 1800 mg/kg (males); 1600 mg/kg (females).
Low toxicity.

Dermal LD50 (rabbit): >2000 mg/kg. Low toxicity.

Eye (rabbit): Moderate irritant. Eyes normal after 72 hours.

Skin irritation (rabbit): Not primary skin irritant.

Skin sensitization (guinea pig): Not a sensitizer.

Inhalation LC50, 4 hr, rat: >4.9 mg/L

OTHER STUDIES: Flusilazole

Flusilazole is a mild skin and eye irritant, but is not a skin sensitizer in animals.

The effects in animals from a single high exposure by inhalation include weight loss, labored breathing and other nonspecific effects.

Single high dermal exposures resulted in weight loss, labored breathing, depression and other nonspecific effects.

Toxicity described in animals from administration of single high oral doses include weight loss, labored breathing and nonspecific effects. Repeated oral dosing resulted in increased liver weights, reversible changes of the bladder, kidneys, testes, epididymides, and liver, slight hemolytic effect, and reduced body weight gain. A 90-day feeding study in mice which included lethal dose levels showed high dose effects of heart muscle degeneration and pneumonitis in addition to some of the effects listed above. Long term oral dosing caused increased liver weights, mild inflammatory response in the liver, and stomach, clinical chemical and hematological changes.

Animal testing indicates that this compound is a weak carcinogen at high doses. All the tumor types appeared in the presence of significant chronic toxicity in the target tissues and would not be expected to present a significant risk to humans exposed to much lower levels of flusilazole. In a two-generation feeding study, there was an increase in gestation weights in exposed animals; however, these effects only occurred at dose levels that caused other toxicity in the parental animals. Therefore, this compound is not considered a reproductive hazard. Tests in animals indicate that the compound may be a weak developmental toxicant.

The compound does not produce genetic damage in bacterial or mammalian cell cultures or animals. It has not been tested

(HAZARDS IDENTIFICATION - Continued)

for heritable genetic damage.

HUMAN HEALTH EFFECTS of OVEREXPOSURE to FLUSILAZOLE

Based on animal testing the following may occur:

Overexposure to flusilazole by skin contact may cause skin irritation with discomfort or rash.

Overexposure by eye contact may cause eye irritation with discomfort, tearing, or blurring of vision.

Overexposure by inhalation may cause irritation of the upper respiratory passages.

HUMAN HEALTH EFFECTS of OVEREXPOSURE to XYLENE:

Xylene is a skin, eye, nose and throat irritant.

Prolonged skin contact can cause defatting, redness, blisters and dehydration of the skin. Skin permeation can occur in toxic amounts.

Overexposure by inhalation can cause nausea, headache, weakness, dizziness, confusion, incoordination and loss of consciousness.

Overexposure by ingestion can cause gastrointestinal irritation and symptoms of central nervous system depression.

Gross overexposures can cause heart stress, anemia, respiratory difficulties, bleeding from mucosal surfaces, liver and kidney effects and death.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

(FIRST AID MEASURES - Continued)

In case of contact, immediately wash skin with soap and water.
Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water
for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses
of water. Never give anything by mouth to an unconscious person.
Call a physician.

FIRE FIGHTING MEASURES

Flammable Properties

Not a fire or explosion hazard.

Flash Point : 123 F (51 C)
Method : Setaflash Closed Cup - SCC.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective
equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL)
sections before proceeding with clean-up. Use appropriate
PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Initial Containment

Dike spill.

HANDLING AND STORAGE

Handling (Personnel)

Avoid contact with eyes, skin or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Storage

Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment

For worker protection during mixing, loading and application, wear a hat, long sleeve shirt and long legged trousers or overalls and rubber gloves. In addition, during mixing and loading or otherwise handling, wear goggles or a face shield. Protective clothing should be laundered separately following application.

Respiratory protection should not be required for normal use and handling. During abnormal exposures, if levels might reach or exceed exposure limits, use of an approved pesticide respirator is recommended.

Exposure Guidelines

Applicable Exposure Limits

FLUSILAZOLE

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 0.1 mg/m ³ , 8 & 12 Hr. TWA, Skin

XYLENES (mixed isomers)

PEL (OSHA)	: 100 ppm, 435 mg/m ³ , 8 Hr. TWA
TLV (ACGIH)	: 100 ppm, 8 Hr. TWA, A4 STEL 150 ppm, A4
AEL * (DuPont)	: 100 ppm, 8 & 12 Hr. TWA 150 ppm, 15 minute TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Odor : (slight), Aromatic, Solvent.
Form : Emulsifiable Concentrate.
Color : Green.
Density : 1.07-1.09 g/mL @ 20 deg C
pH : 4-7 (5% distilled water)

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Polymerization

Polymerization will not occur.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

The active ingredient, fluislazole, is moderately toxic.

96 hour LC50, bluegill sunfish: 1.7 mg/L
96 hour LC50, rainbow trout : 1.2 mg/L
48 hour LC50, daphnia : 3.4 mg/L

ENVIRONMENTAL TOXICITY:

Oral (gavage) LD50, mallard duck : > 1590 mg/kg
Oral (dietary) LC50, bobwhite quail: > 5260 ppm

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
Proper Shipping Name : XYLENE SOLUTION
Hazard Class : 3
UN No. : UN 1307
Packing Group : PG III

OTHER INFORMATION

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS: Crop Protection
Address : Wilmington, DE 19898
Telephone : 1-888-638-7668

Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS