



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

Page 1

M0000220 "ALMIX" 20 WP Herbicide
Revised 10-JUL-2001

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Tradenames and Synonyms

DPX-MA973 20 WP

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	%
Metsulfuron Methyl (methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate)	74223-64-6	10
*Chlorimuron Ethyl (ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate)	90982-32-4	10
Inert Ingredients		80

* 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! Harmful if absorbed through skin.

Based on animal testing the following may occur from overexposure: Overexposure to ALMIX 20 WP by eye contact may initially include eye irritation with discomfort or tearing.

(HAZARDS IDENTIFICATION - Continued)

Dermal exposures are not expected to cause irritation. Significant skin permeation, and systemic toxicity, after contact appears unlikely. Prolonged ingestion of high doses of chlorimuron ethyl may cause abnormal liver function as detected by laboratory tests; or anemia. Otherwise, no acceptable information is available to confidently predict the effects of excessive human exposures to this compound. Individuals with preexisting diseases to the liver may have increased susceptibility to the toxicity of excessive exposures.

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

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

SKIN CONTACT

Flush skin with water after contact. 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.

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

INGESTION

If swallowed, immediately give 2 glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.

FIRE FIGHTING MEASURES

Flammable Properties

Flammable Limits in Air:

,LEL,,, : >1.35 g/L
,Autoignition,, : >600 C (>1112 F) Airborne

Extinguishing Media

Use media appropriate for surrounding material.

Fire Fighting Instructions

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Runoff from fire control may be a pollution hazard.

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

Clean up by scoop or vacuum.

Spill Clean Up

Shovel and sweep up or use industrial vacuum cleaner. Avoid generating dust clouds. Put into containers for reclaiming or disposal.

HANDLING AND STORAGE

Handling (Personnel)

Avoid breathing dust. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. 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

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits.

Personal Protective Equipment

EYE/FACE PROTECTION: Wear safety glasses.

RESPIRATORS: Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH approved respiratory protection.

SKIN PROTECTION: Wear protective gloves to minimize skin contamination. Wash hands and contaminated skin thoroughly after handling.

Exposure Guidelines

Applicable Exposure Limits

Metsulfuron Methyl

PEL (OSHA) : None Established
TLV (ACGIH) : None Established
AEL * (DuPont) : 10 mg/m³, 8 & 12 Hr. TWA

Chlorimuron Ethyl

PEL (OSHA) : None Established
TLV (ACGIH) : None Established
AEL * (DuPont) : 10 mg/m³, 8 & 12 Hr. TWA, total dust
5 mg/m³, 8 & 12 Hr. TWA, respirable dust

* 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).
Form : Wettable Powder.
Color : Beige.

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Acute Oral LD50: >5000 mg/kg (male and female rats).

Acute Dermal LD50: >2000 mg/kg (male and female rats).

Skin Irritation and Sensitization: Not an irritant in tests with rabbits; not a sensitizer in tests with guinea pigs.

Eye: Classified as a "non-irritant" according to the guide to the labeling of dangerous substances published in the Official Journal of the European Communities (EEC Directive 93/21; the 3 rabbit test).

OTHER STUDIES - Metsulfuron methyl

Feeding Study: No oncogenic effects observed in 18 month mouse and 2 year rat feeding study.

Reproduction: Slightly decreased parental body weight at 5000 ppm. No effect on rat reproduction or lactation at any dose tested (highest dose tested 5000 ppm).

Teratogenicity: Not teratogenic or embryo-fetal toxic by gavage in rats (highest dose tested 1000 mg/kg) or by gavage in rabbits (highest dose tested 5000 ppm)

Mutagenicity: Not mutagenic in Ames bacterial assay, Chinese Hamster Ovary Cell assay, or DNA rat liver repair assay; positive in the in vitro Chinese Hamster Ovary Cell cytogenic assay but negative in the in vivo rat bone marrow cytogenic assay.

OTHER STUDIES - Chlorimuron ethyl

2-year Rat Study: Dietary concentrations were 0, 25, 250 or 2500 ppm. This compound was not oncogenic at any dose. The no-observable-effect-level (NOEL) was 250 ppm based on

(TOXICOLOGICAL INFORMATION - Continued)

transient anemia observed during the first year of the study and on slight body and organ weight changes.

18-month Mouse Study: Dietary concentrations were 0, 12.5, 125 or 1250 ppm. There were no oncogenic or other effects observed at any dose. Therefore the NOEL was at least 1250 ppm, the highest level tested.

1-year Dog Study: Dietary concentrations were 0, 25, 250 or 1500 ppm. The NOEL was 250 ppm based on increased liver weight, clinical chemistry changes and anemia at the high dose.

Reproduction: Dietary concentrations were 0, 25, 250 or 2500 ppm for a 2-generation, 4-litter study in rats. Reproduction and lactation performance were not affected at any dose. The NOEL for maternal and fetotoxicity was 250 ppm. This was based on reduced maternal and fetal body weights and a compromised nutritional state among offspring at the high dose.

Teratology Studies: Rats were dosed via intubation at 0, 30, 150 or 600 mg/kg/day. The NOEL for maternal and fetotoxicity was 30 mg/kg/day based on reduced food consumption and body weight gain and increased frequency of fetal variations. There was a slight increase in the number of fetal malformations in the presence of overt maternal toxicity at the high dose. Although this was not statistically significant, it was considered to be a weak teratogenic response. In this study, chlorimuron ethyl was not demonstrated to be a unique hazard to the conceptus.

Rabbits were dosed via intubation at 0, 15, 60 or 300 mg/kg/day. There were no teratogenic effects at any dose. The NOELs for maternal and fetotoxicity were 60 and 15 mg/kg/day, respectively. These were based on reduced body weight gain and increased frequency of fetal variations due to retarded development.

ECOLOGICAL INFORMATION

Ecotoxicological Information

Aquatic Toxicity

Metsulfuron methyl -
,96 hr LC50, Rainbow Trout, : >150 ppm
,96 hr LC50, Bluegill Sunfish, : >150 ppm

Chlorimuron ethyl -
,96 hr LC50, Rainbow Trout, : >1000 ppm

(ECOLOGICAL INFORMATION - Continued)

,96 hr LC50, Bluegill Sunfish,: >100 ppm

Environmental Toxicity

Metsulfuron methyl -
,LD50, Mallard Duck,: >2510 mg/kg
,LC50, Bobwhite Quail,: >5620 ppm

Chlorimuron ethyl -
,LD50, Mallard Duck,: >2510 mg/kg
,LC50, Bobwhite Quail,: >5620 ppm

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
Proper Shipping Name : Not Regulated

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

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