Material Safety Data Sheet

Dacarbazine
MSDS\# 91381
Section 1 - Chemical Product and Company Identification
MSDS Name: Dacarbazine
Catalog
Numbers:
Synonyms:
BP2513-1, BP2513-100, BP2513-250, BP2513-5
Deticene; (Dimethyltriazeno)imidazolecarboxamide; 4-(Dimethyltriazeno)imidazole-5-Carboxamide; 1H-Imidazole-4-Carboxamide, 5-(3,3-Dimethyl-1-Triazenyl)-.

Company Identification:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call:
201-796-7100
Emergency Number US:
201-796-7100
CHEMTREC Phone Number, US:
800-424-9300
Section 2 - Composition, Information on Ingredients

| CAS\#: | 4342-03-4 <br> Chemical Name: |
| :--- | :--- |
| \%: | Dacarbazine <br> ca 100 |
| EINECS\#: | $224-396-1$ |

Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Warning! May cause liver damage. May cause cancer based on animal studies. Potential cancer hazard. Causes eye, skin, and respiratory tract irritation. Target Organs: Blood, liver.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May cause erythema (redness) and edema (fluid buildup) with crusting and scaling. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. Exposure may
Ingestion: cause anemia and other blood abnormalities. May cause anemia, leukopenia (reduction in the number of white blood cells in the blood), and thrombocytopenia.
Inhalation:
Causes respiratory tract irritation. Exposure to thermodegradation products may cause influenza-like symptoms such as chills, headache, mild respiratory discomfort, shaking of the limbs, and high fever.
Chronic: May cause cancer according to animal studies. Chronic exposure may cause liver damage.

## Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: $\quad$ Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If

Ingestion:

Inhalation:
Notes to
Physician:

General
Information:

Extinguishing
Media:
conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

Flash Point: Not applicable.
Explosion Not available
Limits: Lower:
Explosion
Limits: Upper: available
NFPA Rating: health: 2 ; flammability: 0 ; instability: 0 ;

Section 6 - Accidental Release Measures
General Information:

Spills/Leaks:

Use proper personal protective equipment as indicated in Section 8.
Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below $4^{\circ} \mathrm{C} / 39^{\circ} \mathrm{F}$.)

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Dacarbazine: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

## Exposure Limits

Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties
Physical State: Powder
Color: off-white to light yellow

Strong oxidizing agents.
Nitrogen oxides, carbon monoxide, carbon dioxide.
Has not been reported.
Section 11 - Toxicological Information

RTECS\#: CAS\# 4342-03-4: NI3950000
RTECS:
LD50/LC50: CAS\# 4342-03-4: Oral, mouse: LD50 $=2032 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=2147 \mathrm{mg} / \mathrm{kg}$;

Carcinogenicity:
Dacarbazine - California: carcinogen, initial date 1/1/88 NTP: Suspect carcinogen IARC: Group 2B carcinogen
Epidemiology: Not available
Teratogenicity: Teratogenic effects have occurred in experimental animals.
Reproductive: Adverse reproductive effects have occurred in experimental animals.
Neurotoxicity: Not available
Mutagenicity: Mutagenic effects have occurred in experimental animals.
Other: See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

Not available

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.

## Section 14 - Transport Information

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:

UN Number:

## Section 15 - Regulatory Information

## US Federal

TSCA
CAS\# 4342-03-4 is not listed on the TSCA Inventory. It is for research and development use only.

Health \& Safety
Reporting List
Chemical Test Rules
Section 12b
TSCA Significant New
Use Rule
CERCLA Hazardous
Substances and corresponding RQs
SARA Section 302
Extremely Hazardous
Substances

Clean Air Act:

OSHA:
STATE

California Prop 65

Section $313 \quad$ No chemicals are reportable under Section 313.

Clean Water Act: $\quad$| of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the |
| :--- |
| chemicals in this product are listed as Toxic Pollutants under the CWA. |

None of the chemicals are on the Health \& Safety Reporting List.
None of the chemicals in this product are under a Chemical Test Rule.
None of the chemicals are listed under TSCA Section 12b.
None of the chemicals in this material have a SNUR under TSCA.

None of the chemicals in this material have an RQ.

None of the chemicals in this product have a TPQ.

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. None of the chemicals in this product are listed as Hazardous Substances under the CWA. None chemicals in this product are listed as Toxic Pollutants under the CWA.

Dacarbazine can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act: WARNING: This product contains Dacarbazine, a chemical known to the state of California to cause cancer. WARNING: This product contains Dacarbazine, a chemical known to the state of California to cause birth defects or other reproductive harm.

## California No Significant Risk Level: <br> CAS\# 4342-03-4: 0.01 æg/day NSRL

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 45 May cause cancer.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
WGK (Water Danger/Protection)
CAS\# 4342-03-4: Not available
Canada
Canadian WHMIS Classifications: D2A, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 4342-03-4 is not listed on Canada's Ingredient Disclosure List.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

