

**MATERIAL SAFETY DATA SHEET**

Agricultural Products Group  
P.O.Box 13528,  
Research Triangle Park, NC 27709  
(919) 547-2000

**EMERGENCY TELEPHONE NUMBERS:**

BASF Corporation: 1 (800) 832-HELP

CHEMTREC: 1 (800) 424-9300

Product No.: 579641

Image® 70 DG herbicide

Date Prepared: 7/27/2000 Date Revised: 6/20/2002

**SECTION I**

<b>Trade Name:</b> Image® 70 DG herbicide	
<b>Chemical Name:</b> 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinolinecarboxylic acid	
<b>Synonyms:</b> Imazaquin; AC 252, 214	<b>Formula:</b> C(17) H(17) O(3) N(3)
<b>Chemical Family:</b> Imidazolinone	<b>Mol Wt:</b> 311.34

**SECTION II - INGREDIENTS**

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
Imazaquin technical	81335-37-7	70.0	5 mg/m(3) - BASF recommended
Inerts	N/A	30.0	None established

This formulation contains clay. Clay may contain more than 0.1% crystalline silica.

**SARA Title III Section 313:** Not listed**SECTION III - PHYSICAL DATA**

<b>BOILING/MELTING POINT@760mm Hg:</b>	426 - 432 °C (m.p.)	<b>pH:</b>	4 - 4.6
<b>VAPOR PRESSURE mmHg @ 20°C:</b>	N/D		
<b>SPECIFIC GRAVITY OR BULK DENSITY:</b>	> 25 lb/ft(3)		
<b>SOLUBILITY IN WATER:</b>	60 ppm @ 25° C (for the technical)		
<b>APPEARANCE:</b>	Off-white to light beige solid	<b>ODOR:</b>	Nutty
		<b>INTENSITY:</b>	Slight

**SECTION IV - FIRE AND EXPLOSION DATA**

<b>FLASH POINT (TEST METHOD):</b>	N/D	<b>AUTOIGNITION TEMP:</b>	> 572° F
<b>FLAMMABILITY LIMITS IN AIR (% BY VOL):</b>	LOWER: N/D		UPPER: N/D
<b>NFPA 704 HAZARD CODES</b>			
<b>HEALTH:</b>	N/R	<b>FLAMMABLE:</b>	N/R
		<b>INSTABILITY:</b>	N/R
		<b>OTHER:</b>	N/R
<b>NFPA 30 STORAGE CLASSIFICATION:</b>	N/R		
<b>EXTINGUISHING MEDIUM</b>	Use water fog, foam, CO(2), or dry chemical extinguishing media.		
<b>SPECIAL FIREFIGHTING PROCEDURES</b>	Firefighters should be equipped with self-contained breathing apparatus and turnout gear.		
<b>UNUSUAL FIRE EXPLOSION HAZARDS</b>	Organic dusts may form an explosive dust/air mixture. Decomposition temperature > 383° F. This material has been found to be a Class ST 1 dust explosion hazard.		

**SELECT ACRONYM KEY**

N/A - Not available; N/D - Not determined; N/R - Not rated; N/E - Not established

**SECTION V - HEALTH DATA****TOXICOLOGICAL TEST DATA:**

Data for the formulation:

- Rat, Oral LD50 (combined sexes) > 6598 mg/kg
- Rabbit, Dermal LD50 (combined sexes) > 2000 mg/kg
- Rat, Inhalation LC50 (4 hr) - Not available
- Rat, Inhalation LC50 (1 hr calculated) - Not available
- Rabbit, Eye Irritation - Mildly irritating
- Rabbit, Skin Irritation - Not available
- Guinea pig, Dermal Sensitizer - Not a sensitizer

**OSHA, NTP, or IARC Carcinogen:** See EFFECTS OF OVEREXPOSURE**EFFECTS OF OVEREXPOSURE:****See Product Label and Directions For Use for additional precautionary statements.****CAUTION**

Causes eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if absorbed through skin.  
Signs of overexposure by ingestion in animal studies included epistaxis, diuresis, salivation, and depression.

This formulation contains clay (kaolin). Kaolin may contain more than 0.1% crystalline silica.

Overexposure to crystalline silica results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses. The International Academy for Research on Cancer (IARC) has classified crystalline silica in Group 1 (those agents with evidence of carcinogenicity to humans).

Existing medical conditions aggravated by this product: None known.

**FIRST AID PROCEDURES**

- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
- If inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.
- Note to physician:** Treat symptomatically. No specific antidote.
- Note:** Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**SECTION VI - REACTIVITY DATA****STABILITY:** Stable. Do not store below 32° F or above 100° F.**CONDITIONS TO AVOID:** Store in original container in cool, dry, well ventilated place away from ignition sources, heat or flame.**CHEMICAL INCOMPATIBILITY:** See Section X - Additional Information.**HAZARDOUS DECOMPOSITION PRODUCTS:** Including but not limited to oxides of carbon and nitrogen.**HAZARDOUS POLYMERIZATION:** Does not occur.**CONDITIONS TO AVOID:** Does not polymerize.**CORROSIVE TO METAL:** See Section X**OXIDIZER:** No

## SECTION VII - PERSONAL PROTECTION

**PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions For Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170.**

### **RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:**

**Respiratory Protection:**

Supplied air respirators should be worn if large quantities of mist/dust are generated or prolonged exposure possible.

**Eye Protection:**

Chemical goggles when respirator does not provide eye protection.

**Protective Clothing:**

Gloves and protective clothing as necessary to prevent skin contact.

**Ventilation:**

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

## SECTION VIII - ENVIRONMENTAL DATA

### **ENVIRONMENTAL TOXICITY DATA**

See the product label for information regarding environmental toxicity.

### **SARA 311/312 REPORTING**

**FIRE: N      PRESSURE: N      REACTIVITY: N      ACUTE: Y      CHRONIC: N      TPQ(lbs): N/R**

### **SPILL AND LEAK PROCEDURES:**

In case of large scale spillage of this product, avoid contact, isolate area and keep out animals and unprotected persons. Call CHEMTREC (800 424-9300) or BASF Corporation (800 832-HELP). For a small spill, wear personal protective equipment as specified on the label.

FOR A LIQUID SPILL: Dike and contain the spill with inert material (sand, earth, etc.) and transfer the liquid and solid diking materials to separate containers for disposal.

FOR A SOLID SPILL: Sweep solid into a drum for re-use or disposal. Remove personal protective equipment and decontaminate it prior to re-use.

**HAZARDOUS SUBSTANCE SUPERFUND:      No      RQ(lbs): None**

### **WASTE DISPOSAL METHOD:**

Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**HAZARDOUS WASTE 40CFR261:      No      HAZARDOUS WASTE NUMBER:      None**

### **CONTAINER DISPOSAL:**

FOR PLASTIC CONTAINERS: Triple rinse (or equivalent) and add rinsate to the spray tank. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR BULK CONTAINERS: Reusable containers should be returned to the point of purchase for cleaning and re-filling.

FOR MINIBULK CONTAINERS: Clean all tanks on an approved loading pad so rinsate can be collected and mixed into the spray solution or into a dedicated tank. Using a high pressure sprayer, rinse several times with small volumes of water to minimize rinsate.

**SECTION IX - SHIPPING DATA - PACKAGE AND BULK****D.O.T. PROPER SHIPPING NAME (49CFR172.101-102):**

None

**HAZARDOUS SUBSTANCE  
(49CFR CERCLA LIST):**

None

**RQ(lbs):** None**D.O.T. HAZARD CLASSIFICATION (CFR 172.101-102):****PRIMARY**

None

**SECONDARY****D.O.T. LABELS REQUIRED (49CFR172.101-102):**

None

**D.O.T. PLACARDS  
REQUIRED (CFR172.504):**

None

**POISON CONSTITUENT  
(49CFR172.203(K)):**

None

**BILL OF LADING DESCRIPTION**

Compounds, tree or weed killing (herbicides), NOIBN  
This product is not regulated by the Department of Transportation.

**CC NO.:** Not applicable**UN/NA CODE:** None**SECTION X - ADDITIONAL INFORMATION****Image® 70 DG herbicide****SECTION VI - REACTIVITY DATA** Chemical Incompatibility:

Do not mix or store this product or its solutions in unlined steel or aluminum containers. Store away from oxidizers.

**EPA Reg. No. 241-319****KEEP OUT OF REACH OF CHILDREN****CAUTION**

**Complete Label and Directions For Use are attached to the product.**

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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**DISCLAIMER**

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