

# Material Safety Data Sheet



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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product name:** BLOCKING REAGENT  
**Product number:** 1096176  
**Global material number:** 11096176001  
**Business area:** Roche Applied Sciences  
**Product line:** Not applicable  
**Instrument type:** Not applicable

**Supplier:**  
Roche Diagnostics Corporation  
9115 Hague Road  
Indianapolis, IN 46250  
Site Phone Number: 1-800-428-5074

**Emergency telephone number:**  
CHEMTREC:  
1-800-424-9300 (U.S. or Canada)  
1-703-527-3887 (International)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	OSHA PEL:	OSHA STEL:	ACGIH TLV:	ACGIH STEL:
Maleic acid	110-16-7	1-5	NA	NA	NA	NA

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

**NFPA Ratings:** Health= 0 Flammability= 1 Reactivity= 0

**Special Definitions:** A=Allergen CA=Carcinogen CO=Corrosive F=Flammable H=Harmful I=Irritant Ox=Oxidizer PB=Potential Biohazard  
R=Reproductive S=Sensitizer T=Toxic T+=Highly Toxic W=Water Reactive

**Principle routes of exposure:** Ingestion, skin and/or eye contact

**Inhalation:** None

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

**Skin contact:** None

**Eye contact:** Contact with eyes may cause irritation

**Sensitization or Odor threshold:** The following chemical(s) may cause sensitization, be absorbed via skin, and/or has an odor threshold for detection:

**Medical conditions aggravated by exposure:** None known

**Additional information:** None

## 4. FIRST AID MEASURES

**Inhalation:** Consult a physician. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

**Skin contact:** Rinse with plenty of water. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use

**Ingestion:** Consult a physician. Do not induce vomiting without medical advice

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice

**Notes to physician:** None determined

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Use dry chemical, CO<sub>2</sub>, water spray or 'alcohol' foam

**Unusual hazards:** Combustible material.

**Special protective equipment for firefighters:** Wear self contained breathing apparatus for fire fighting if necessary

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Evacuate personnel to safe areas

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up:** Never return spills in original containers for re-use. Sweep up or vacuum (if powder) or soak up with inert absorbent material (if liquid), then place into a suitable clean, dry, closed container, and label for disposal

## 7. HANDLING AND STORAGE

**Handling:** Protect from contamination. Wear personal protective equipment

**Storage:** No special precautions required

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Not applicable

### Personal Protective Equipment

**Respiratory protection:** Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow the OSHA regulation, 29CFR1910.134. Always use a NIOSH approved respirator when necessary

**Hand protection:** Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly

**Skin and body protection:** Wear appropriate body protection to prevent skin contact

**Eye protection:** Wear appropriate eye protection to prevent eye contact

**Hygiene measures:** Avoid contact with skin, eyes and clothing

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid.

**Solubility in water:** Insoluble.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions

**Polymerization:** Not applicable

**Hazardous decomposition products:** Carbon oxides

**Materials to avoid:** Strong acids and strong bases. Strong oxidising agents

## 11. TOXICOLOGICAL INFORMATION

Components	NIOSH - Selected LD50s and LC50s:	NIOSH Pocket Guide - Target Organs:
Maleic acid	=1560 mg/kg Dermal LD50 Rabbit	

**Inhalation:** No additional data available

**Skin:** No additional data available

**Oral:** No additional data available

**Mutagenic effects:** No data is available on the product itself

**Reproductive toxicity:** No data is available on the product itself

## 12. ECOLOGICAL INFORMATION

**Bioaccumulation:** Not determined

**Aquatic toxicity:** No data is available on the product itself

**Ecotoxicity effects:** No data is available on the product itself

**U.S. EPA, RCRA, CERCLA, SARA, or DGC information on persistent, bioaccumulative, and toxic chemicals (PBTs):**

The following chemicals are listed under the U.S. EPA regulations of RCRA, CERCLA, SARA, or DGC:

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous

### 14. TRANSPORT INFORMATION

**Is product hazardous to ship?** No

**DOT**

**Proper shipping name:** None

**UN Number:** Not applicable      **Hazard class:** Not applicable      **Subsidiary risk:** Not applicable      **Packing group:** Not applicable

**ICAO/IATA**

**Proper shipping name:** None

**UN Number:** Not applicable      **Hazard class:** Not applicable      **Subsidiary risk:** Not applicable      **Packing group:** Not applicable

### 15. REGULATORY INFORMATION

**U.S. Regulations:**

**U.S. CERCLA/SARA/TSCA Regulatory Information:** The following chemicals are listed under the following TSCA/SARA/CERCLA lists. Refer to TSCA regulation if you need a definition for acronyms that may be shown in the TSCA Inventory field in the table below

Components	CERCLA/SARA 302 RQ and TPQ (40 CFR 355, App.A)	CERCLA/SARA 304 RQ (40 CFR Table 302.4)	SARA 313 Emission reporting	TSCA Inventory
Maleic acid		=2270 kg final RQ		Present

**U.S. Clean Water Act (CWA)/ California Proposition 65:** The following chemicals are listed under the CWA and/or California Proposition 65:

Components	Clean Water Act Hazardous Substances	Clean Water Act Priority Pollutants	California Proposition 65
Maleic acid	Present		

**Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### 16. OTHER INFORMATION

**Reason for revision:** Not applicable

**References:** None

**Additional advice:** None

**Prepared by:** Roche Diagnostics, Health & Safety Department, MSDS Contact: 317-521-7425 or 317-521-7505

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**End of Safety Data Sheet**