

# Citric acid USAGE POLICY

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NFPA Rating

Health Hazard: 2

Fire: 0

Flammability: 0 Reactivity :0 Hazard: 1

Physical hazards: 1

## HEALTH HAZARDS

•**Eye:** Causes severe eye irritation and possible injury.

**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Excessive intake of citric acid may cause erosion of the teeth.

**Inhalation:** Causes respiratory tract irritation.

**Chronic:** Repeated exposure may cause sensitization dermatitis.

## HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

## CONDITIONS TO AVOID

Incompatible materials, dust generation, moisture, exposure to moist air or water.

# PERSONAL PROTECTION

**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:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## FIRE FIGHTING MEASURES

**Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.**

# FIRST AID MEASURES

## General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

## If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician

## USERS

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## REFERENCES

- 1) <http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=251275&brand=SIAL&PageToGoToURL=http%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsial%2F251275%3Flang%3Den>
- 2) [http://avogadro.chem.iastate.edu/MSDS/citric\\_acid.htm](http://avogadro.chem.iastate.edu/MSDS/citric_acid.htm)