

CYANTEK CORPORATION

Page 1 of 4

NaOH-50

Material Safety Data Sheet

1 Product and Company Identification:

- **Product name:** NaOH-50, Sodium Hydroxide, 50% Aqueous Solution
- **Manufacturer:**
CYANTEK CORPORATION
3055 Osgood Court
Fremont, CA 94538
(510) 651-3341
- **24 Hour Emergency Telephone Number:**
CHEMTREC: (800) 424-9300 (North America): (703) 527-3887 (Int'l.)

2 Composition/Information on Ingredients:

- **Chemical formula:** NaOH + H₂O
- **Hazardous components:**

Component	Percent by wt.	CAS Number
Sodium Hydroxide	50%	1310-73-2
Water	50%	7732-18-5

3 Hazards identification

- **Hazard description:** Corrosive.
- Extremely corrosive to eyes, skin and respiratory system.
- **Classification system**
The classification was made from the hazardous components' MSDS's.

4 First aid measures

- **Inhalation:** Supply fresh air; consult doctor in case of complaint.
- **Skin contact:** Flush affected areas with plenty of water, remove contaminated clothing, get medical attention if irritation persists.
- **Eye contact:** Rinse opened eye for several minutes under running water. Consult a doctor immediately.
- **Ingestion:** Give large amounts of water. Consult a doctor immediately.

5 Fire fighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment** Wear goggles, rubber gloves and boots, self contained breathing apparatus, and caustic resistant protective clothing.

CYANTEK CORPORATION

Page 2 of 4

NaOH-50

6 Accidental release measures

- **Personal precautions:** Wear goggles, rubber boots and gloves, and caustic resistant protective clothing.
- **Environmental precautions:** Do not allow substance to enter sewage system, surface or ground water.
- **Methods for cleaning up:** Contain the spill by diking/absorbing with liquid-binding material (sand, diatomite, caustic binders, universal binders). Ensure adequate ventilation.

7 Handling and storage

Handling

- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
No special measures required.

Storage

- Store between 50 and 77 Degrees F.
- Keep containers tightly sealed.
- Store away from strong acids.

8 Exposure controls and personal protection

- **Engineering controls:**
No further data; see section 7.
Exposure limits (threshold limit values):

Sodium Hydroxide: 2.0 mg/m³ (ceiling)
- **General protective and hygienic measures:**
Keep away from foodstuffs and beverages.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:** Caustic resistant gloves.
- **Eye protection:** Tightly sealed goggles.
- **Body protection:** Caustic resistant protective work clothing.

CYANTEK CORPORATION

Page 3 of 4

NaOH-50

9 Physical and chemical properties:

- **Physical state:** Liquid
- **Color:** Clear, colorless
- **Odor:** Odorless
- **Boiling point:** 140 degrees C
- **Flash point:** Not applicable
- **Self ignition temperature:** Not applicable
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapor pressure** at (20 °C): 0.2 kPa
- **Density** at (20 °C): 1.53 g/cm³
- **Solubility in water:** Fully soluble

10 Stability and reactivity

- **Thermal decomposition avoided:** No decomposition
- **Dangerous reactions:** Incompatible with strong acids. Produces flammable and explosive Hydrogen gas if it reacts with metals such as Aluminum, Tin, or Zinc.
- **Dangerous products of decomposition:** Releases toxic gases if heated to complete evaporation.
- **Avoid boiling of product**

11 Toxicological information

- **Acute toxicity:** Corrosive to skin and eyes. Exposure to vapors could cause pulmonary edema
- **Primary irritant effect on the skin and eye:** Corrosive. Eye damage ranges from mild irritation to severe ulceration and clouding of eye tissue leading to permanent blindness. Sodium Hydroxide is extremely corrosive to skin and is capable of causing severe burns with deep ulceration and permanent scarring. Onset of pain may be delayed minutes to hours.
- **Sensitization:** No sensitizing effects known.

12 Ecological information:

- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- Do not allow product to reach sewage system.
- Dispose of product (including packagings) in accordance with applicable regulations.

CYANTEK CORPORATION

Page 4 of 4

NaOH-50

14 Transportation information

Land (CFR 49), Maritime (IMDG), Air (ICAO)

- **Class:** 8 (corrosive)
- **UN Number:** 1824
- **Proper Shipping Name:** Sodium hydroxide
- **Packing Group:** II

15 Regulations

- **CERCLA Hazardous Substances (with reportable quantity):** Sodium Hydroxide (1000#)
- **Extremely Hazardous Substances (with threshold quantity):** None
- **Toxic Chemicals (Section 313):** None
- **TSCA Inventory:** All ingredients on TSCA inventory
- **Proposition 65 List:** None
- **Clean Water Act Hazardous Substance List (with reportable quantity):** Sodium Hydroxide (1000#)
- **Clean Air Act Synthetic Organic Chemical (CAA SOCM):** None
- **Clean Air Act Accidental Release Prevention Substance, section 112 r (with threshold quantity):** None
- **PSM Highly Hazardous Chemical List (with threshold quantity):** None
- **Safety phrases:**

Do not breathe fumes.

In case of contact with eyes, rinse immediately with plenty of water
And seek medical advice.

Wear suitable protective clothing.

In case of accident seek medical advice immediately.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.