

*** MATERIAL SAFETY DATA SHEET ***

Buffer Concentrate pH 4.00

*** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ***

MSDS Name: Buffer Concentrate pH 4.00

Catalog Numbers: S70000, NC9905318, SB99-1, SB99-500

Synonyms: Fisher Scientific

Company Identification: 1 Reagent Lane

For information, call: Fairlawn, NJ 07410

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

*** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ***

CAS#	Chemical Name	%	EINECS#
50-00-0	Formaldehyde	0.05	200-001-8
67-56-1	Methyl alcohol	0.02	200-659-6
877-24-7	Potassium hydrogen phthalate	2.0	212-889-4
7732-18-5	Water	97.93	231-791-2

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

*** SECTION 3 - HAZARDS IDENTIFICATION ***

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

Caution! May cause respiratory tract irritation. May cause skin

irritation. May cause eye irritation. May cause allergic respiratory

reaction. May cause allergic skin reaction.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause mild skin irritation. May cause skin sensitization, an

allergic reaction, which becomes evident upon re-exposure to this

material. Low hazard for usual industrial handling.

Ingestion:

Low hazard for usual industrial handling. May cause gastric

disturbances and electrolytic imbalance.

Inhalation: May cause allergic respiratory reaction. May cause respiratory tract

irritation. Low hazard for usual industrial handling.

Chronic: May cause cancer according to animal studies.

*** 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: Gently lift eyelids and flush continuously with water.

Ingestion: Flush skin with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Get medical aid if

irritation develops or persists. Flush skin with plenty of soap and

water.

Inhalation: If victim is conscious and alert, give 2-4 cupfuls of milk or water.

20. NOR induce vomiting. If conscious and alert, rinse mouth and drink

20. cupfuls of milk or water.

Get medical aid immediately. Remove from exposure and move to fresh

air immediately. If not breathing, give artificial respiration.

Notes to Physician:

Treat symptomatically and

*** SECTION 5 - FIRE FIGHTING MEASURES ***

General Information: wear a self-contained breathing apparatus in

As in any fire, use water, foam, dry chemical, or carbon dioxide

pressure-demand, MSHA/NIOSH (approved or equivalent), and full

protective gear.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to

extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Explosion Limits, upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

*** SECTION 6 - ACCIDENTAL RELEASE MEASURES ***

General Information: Use proper personal protective equipment as indicated

in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth),

then place in suitable container.

*** SECTION 7 - HANDLING AND STORAGE ***

Handling: Use with adequate ventilation. Avoid contact with skin and eyes.

Avoid ingestion and inhalation.

Storage: Store in a cool, dry place.

*** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ***

Engineering Controls:

Good general ventilation should be sufficient to control airborne

levels.

Exposure Limits

Chemical Name

Formaldehyde

ACGIH

0.3 ppm Ceiling

NIOSH

0.016 ppm TWA 20

ppm IDLH

OSHA - Final PELs

0.75 ppm TWA; 2

ppm Action; 0.5

Level; Irritant

and potential

cancer ha zard

(29 CFR

1910.1048)

Methyl alcohol

200 ppm; 250 ppm

STEL; skin -

potential for

absorption

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

none listed

*** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ***

Physical State:

Liquid

Color:

clear, colorless

Odor:

none reported

pH:

4.0

PAGE: 3

```

14 mm Hg @20C
0.7
>1 (ether=1)
Not available
212 deg F
32 deg F
Not available
Not available
Completely so
1.0
Mixture
0

```

***** SECTION 10 - STABILITY AND REACTIVITY *****

polymerization: has not been reported

***** SECTION 11 - TOXICOLOGICAL INFORMATION *****

00-00-0: LP89250000
77-56-1: PC14000000
77-24-7: CZ432600
732-18-5: ZC01100

[illegible][illegible]

ly: the newborn from formaldehyde exposure have been reported by inhalation such as behavioral effects, biochemical and histologic effects and reduced weight gain. Cytological changes were observed. Specific developmental abnormalities were reported by the intraperitoneal route of exposure in mice.

Effects were reported in male rats by inhalation, oral and intraperitoneal injection of formaldehyde. Organs included the prostate, seminal vesicle, Cowper's gland, testes, sperm duct and epididymis. Spermatogenesis was also

***** SECTION 12 - ECOLOGICAL INFORMATION *****

PAGE: 4

Information available.

***** SECTION 13 - DISPOSAL CONSIDERATIONS *****

generators must determine whether a discarded chemical is a hazardous waste. For the classification determination are listed in 40 CFR 261.33 additional generators must consult state or federal waste regulations to ensure complete and accurate waste listings.

Waste listed: waste number U122, CAS# 50-00-04 (Ignitable waste).

***** SECTION 14 - TRANSPORT INFORMATION *****

Information available
Information available.

***** SECTION 15 - REGULATORY INFORMATION *****

FEDERAL
TSCA

CAS# 50-00-0 is listed on the TSCA inventory.
CAS# 67-56-1 is listed on the TSCA inventory.
CAS# 877-24-7 is listed on the TSCA inventory.
CAS# 7732-18-5 is listed on the TSCA inventory.
Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules

None of the chemicals are listed under TSCA Section 12b.

SARA

CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ

CHS# 30-00-0: 300 AD 1FY
SARA Codes

CAS # 877-24-7: acute.
CAS # 877-24-7: acute, Irritable.

This material contains Formaldehyde (CAS# 50-00-0, 0.05%), which is subject to the reporting requirements of Section 313 of SARA Title

This chemical is r
under Section 313

CAS# 50-00-0 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 2 Ozone depleters.

None of the chemicals in this product are listed as Priority
Pollutants under the CWA.

under the CWA.

by OSHA.

Formaldehyde can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

PA, MN, MA, FL, or NJ.
Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.

WARNING: This product contains Formaldehyde, a chemical known to the California State Drinking Water Act;

CALIFORNIA NO SIGNIFICANT RISK LEVEL:
CAS# 50-00-0: 40 ug/day NSRL

Hazard Symbols: Not available.

Safety Phrases:

