

Material Safety Data Sheet



1. PRODUCT IDENTIFICATION

Product Name : N-Histofine® ALK Detection Kit

CREATION DATE: 8/Dec./2010

Product Number : 417071F(20tests)

REVISION DATE: 10/Feb/2012*

Consistent Name :

PRODUCT USE: research

- | | |
|---------------------------------------|--------------------------------------|
| 1. Blocking Reagent | 6. Chromogen Substrate |
| 2. Primary Antibody | 7. Substrate Buffer Solution |
| 3. Negative Control | 8. Chromogen Reagent |
| 4. Bridge Reagent | 9. ALK Antigen Retrieval Solution A |
| 5. Peroxidase labeled Empower Reagent | 10. ALK Antigen Retrieval Solution B |

Manufacture's Name:

NICHIREI BIOSCIENCES INC.

Emergency Telephone Number

81-3-3248-2207

Address (Number, Street, City, State, and ZIP Code):

6-19-20, TSUKIJI, CHUO-KU, TOKYO, 104-8402, JAPAN

2. COMPOSITION and INFORMATION ON INGREDIENTS

1. Blocking Reagent, 8. Chromogen Reagent

1 COMPONENT: Hydrogen peroxide

CAS NUMBER: 7722-84-1

EC NUMBER (EINECS): 231-765-0

PERCENTAGE: <10

EC CLASSIFICATION: No classification assigned.

2 COMPONENT: Non-hazardous

PERCENTAGE: 90-100

2. Primary Antibody, 3. Negative Control, 4. Bridge Reagent and 9. ALK Antigen Retrieval Solution A

1 COMPONENT: Sodium azide

CAS NUMBER: 26628-22-8

EC NUMBER (EINECS): 247-852-1

PERCENTAGE: <0.1

EC CLASSIFICATION: No classification assigned.

2 COMPONENT: Non-hazardous

PERCENTAGE: 99-100

5. Peroxidase labeled Empower Reagent

and 7. Substrate Buffer Solution

1 COMPONENT: Non-hazardous

PERCENTAGE: 100

6. Chromogen Substrate

1 COMPONENT: 3,3'-Diaminobenzidine tetrahydrochloride

CAS NUMBER: 7411-49-6

EC NUMBER (EINECS): 231-018-9

PERCENTAGE: <1

EC CLASSIFICATION: No classification assigned.

2 COMPONENT: Non-hazardous

PERCENTAGE: 90-100

10. ALK Antigen Retrieval Solution B

1 COMPONENT: Ethylene glycol

CAS NUMBER: 107-21-1

EC NUMBER (EINECS): 203-473-3

PERCENTAGE: <40

EC CLASSIFICATION: No classification assigned.

2 COMPONENT: Non-hazardous

PERCENTAGE: 60-100

3. HAZARDS IDENTIFICATION

1. Blocking Reagent, 8. Chromogen Reagent

EU LABELING AND CLASSIFICATION: This product meets the definition of the following hazard class as defined by the European Economic Community Guidelines.

EU CLASSIFICATION: [O] OXIDIZER, [Xn] HARMFUL, [C] CORROSIVE

EU RISK PHRASES: R 8: Contact with combustible material may cause fire; R22: Harmful if swallowed; R34: Causes burns; R41: Risk of serious damage to eyes.

EU SAFETY PHRASES: S3: Keep in cool place; S28: After contact with skin, wash immediately with plenty of water; S37: Wear suitable gloves; S39: Wear eye/face protection; S45: In case of accident or if you feel unwell, seek medical advice immediately.



EMERGENCY OVERVIEW:

COLOUR: Colorless except 2.: green, 4.: reddish violet, 5.: light yellow, 6.: pink-Violet, and 10.:light yellow

PHYSICAL FORM: liquid

ODOUR: odourless except 1., 8.: Slight acrid odor

MAJOR HEALTH HAZARDS: No significant target effects reported.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: nausea, vomiting,
diarrhoea

LONG TERM EXPOSURE: no information on significant adverse effects

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing before reuse. Get medical attention, if needed.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get

INGESTION: If a large amount is swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products

SENSITIVITY TO MECHANICAL IMPACT: Not sensitive

SENSITIVITY TO STATIC DISCHARGE: Not sensitive

FLASH POINT: not flammable

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition products or combustion: oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

7. HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Store between 2 C and 8 C. See original container for storage recommendations. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.
EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
CLOTHING: Lab coat or apron.
GLOVES: Wear appropriate chemical resistant gloves.
PROTECTIVE MATERIAL TYPES: latex, vinyl
RESPIRATOR: No respirator is required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

1. Blocking Reagent, 8. Chromogen Reagent

VAPOR DENSITY: Not Available (Air=10)	EVAPORATION RATE (n-BuAc=1): No Data
SPECIFIC GRAVITY @ 20°C: 1.11 (water=1)	MELTING POINT: -26°C
SOLUBILITY IN WATER: 100%	BOILING POINT: 107°C
VAPOR PRESSURE, mm Hg @ 20°C (68°F): 24	pH: -6.0
ODOR: Slight acrid odor	
APPEARANCE and COLOR: Clear colorless Liquid	

2. Primary Antibody, 3. Negative Control, 4. Bridge Reagent and 9. ALK Antigen Retrieval Solution A

PHYSICAL STATE: liquid	SPECIFIC GRAVITY: Not available
ODOUR: odourless	WATER SOLUBILITY: miscible
BOILING POINT: Not available	VOLATILITY: Not available
FREEZING POINT: Not available	ODOUR THRESHOLD: Not available
VAPOUR PRESSURE: Not available	EVAPORATION RATE: Not available
VAPOUR DENSITY: Not available	COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.
CONDITIONS TO AVOID: None reported.
INCOMPATIBILITIES: oxidising materials, strong acids
HAZARDOUS DECOMPOSITION:
Thermal decomposition products or combustion: oxides of carbon
POLYMERISATION: Will not polymerise.

11. TOXICOLOGICAL INFORMATION

Sodium azide:

ACUTE TOXICITY LEVEL: Insufficient data.
ADDITIONAL DATA: none

Hydrogen peroxide

ACUTE TOXICITY LEVEL: Insufficient data.
ADDITIONAL DATA: IARC has concluded that no adequate data on the carcinogenicity of hydrogen peroxide are available to the Working Group.

3,3'-Diaminobenzidine tetrahydrochloride:

ACUTE TOXICITY LEVEL: Insufficient data.
ADDITIONAL DATA: IARC has concluded that Benzidine and its salts are carcinogenic. Although this substance is structurally related to Benzidine, there is no current evidence that it is a carcinogen.

Ethylene Glycol

ACUTE TOXICITY LEVEL: Insufficient data.
ADDITIONAL DATA: none

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: Not regulated.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: Not regulated.

LAND TRANSPORT ADR: Not regulated.

AIR TRANSPORT IATA: Not regulated.

LAND TRANSPORT RID: Not regulated.

AIR TRANSPORT ICAO: Not regulated.

MARITIME TRANSPORT IMDG: Not regulated.

15. REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: Yes

FIRE: No

CHRONIC: Yes

REACTIVE: No

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

STATE REGULATIONS:

California Proposition 65: Not regulated.

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): No classification assigned.

16. OTHER INFORMATION *

Limitations: The information and recommendations set forth in this SDS are believed to be correct as of this date. Nichirei Biosciences, Inc. makes no warranty with respect to the content of this SDS and disclaims all liability from reliance thereon.