Material Safety Data Sheet

SECTION 1 – IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product Name: Total and Direct Bilirubin Kit – Bilirubin Sodium Nitrite
Product Number: B2A102
Manufacturer/Supplier: Advanced Instruments, Inc.
Two Technology Way
Norwood, MA 02062
1-781-320-9000

Origin: USA

Date of Issue: 2013-04-09

Chemical Identification: Sodium Nitrite ($NNaO_2$)
Intended Use: Bilirubin Sodium Nitrite for use with the Advanced Bilirubin Stat-Analyzer (Model BR2).

SECTION 2 – HAZARDS IDENTIFICATION

Health

Routes of Entry:
Inhalation, ingestions, or skin contact.

Health Hazards:
Ingestion is harmful and may be fatal. Chronic exposure may cause liver and kidney damage. Irritating on contact with skin, eyes, or mucous membranes. Skin absorption may be harmful.

Carcinogenicity:
This material is not listed (ACGIH, IARC, NIOSH, NTP, or OSHA) as a cancer causing agent.

Symptoms of Exposure:
Can cause headache, nausea, vomiting, dizziness, collapse, gastro-intestinal irritation, rapid heartbeat, irregular breathing, coma, convulsions, and death due to circulatory collapse.

Medical Conditions Aggravated by Exposure:
None indicated

SECTION 3 – COMPOSITION/INFORMATION ON INGRIEDIENTS

Component:
Sodium Nitrite
CAS #:
7632-00-0
Synonyms:
Nitrous acid, sodium salt
Percent:
100%

SECTION 4 – FIRST AID MEASURES

Emergency and First Aid Procedures:
SEEK MEDICAL ASSISTANCE IN ALL CASES OF OVEREXPOSURE.

Eyes and Skin:
Immediately flush thoroughly with water for at least 15 minutes.

Inhalation:
Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion:
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point (°F):
Not Available

Flammable Limits:
LEL: Not Available
UEL: Not Available

Extinguishing Media:
Use water only. Contact professional firefighters immediately. Cool containers with flooding quantities of water until well after fire is out. For large fires, flood fire area with water from a distance. Do NOT use dry chemicals, CO_2, Halon, or foams.
Fire Fighting Procedures:
Wear self-contained breathing apparatus and protective clothing.
Fire and Explosion Hazards:
Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Increase the flammability of any combustible material. Contact with oxidizable substances may cause extremely violent combustion. May explode when heated to 537ºC or on severe impact or on contact with cyanides, ammonium salts, cellulose, lithium, potassium plus ammonia, and sodium thiosulfate.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill Response:
Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Section 8, Exposure Controls/Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if it can be done without risk. Avoid raising dust. Clean up and place in closed container for proper disposal as described under, Section 13, Disposal Considerations. Comply with local, state, and country regulations on reporting releases. Refer to Section 15, Regulatory Information, for regulatory data.

SECTION 7 – HANDLING AND STORAGE

Keep container tightly closed. Store in cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Avoid storage on wood floors. Separate from cyanide compounds, incompatibilities, combustibles, organic, or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Do not breathe dust. Do not get in eyes, on skin, or on clothing.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:
Material should be handled or transferred in an approved fume hood or with adequate ventilation. Protective gloves must be worn to prevent skin contact (Neoprene or equivalent). Safety glasses with side shields, or full-face shield must be worn at all times.
Work/Hygienic Practices:
Wash hands thoroughly after handling. Do not take internally. Eyewash and safety equipment should be readily available.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
White or yellowish-white crystalline tablet
Boiling Point:
> 320ºC
Specific Gravity (H_2O = 1):
2.168
Melting Point (ºC):
271ºC
Evaporation Rate (BuAc = 1):
Not Available
Vapor Pressure (mm Hg):
Not Available
Vapor Density (AIR = 1):
Not Available
Volatility:
0%
Solubility in Water (%):
Soluble

SECTION 10 – STABILITY AND REACTIVITY

Stability:
This material is stable in closed containers at room temperature. Material slowly oxidizes to sodium nitrate when exposed to air. Very hygroscopic.
Conditions to Avoid:
Heat, flame, sources of ignition, shock, friction, and incompatibilities
Materials to Avoid:
Reducing agents, acids, amines, chlorates, permanganates, cyanides (e.g. potassium cyanide, sodium cyanide), metals as powders (e.g. hafnium, raney nickel), hypophosphites, sulfites, tannic acid, organic matter, antipyrine, ammonium salts, acetanilide, iodides, mercury salts, moisture, air, activated carbon, vegetable astringents.
Hazardous Decomposition:
Nitrogen oxides, irritating toxic fumes and gases.
Hazardous Polymerization:
Does not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Symptoms of Exposure:
Ingestion is harmful and may be fatal. Can cause headache, nausea, vomiting, and dizziness. Chronic exposure may cause blood, cardiovascular system, and smooth muscle damage. Irritating on contact with skin, eyes, or mucous membranes. Skin absorption may be harmful.
Medical Conditions Aggravated by Exposure:
None indicated.
Routes of Entry:
Inhalation, ingestion, or skin contact.
Carcinogenicity:
This material is not listed (ACGIH, IARC, NIOSH, NTP, or OSHA) as a cancer causing agent.
Toxicity Data:
orl-rat LD50: 150 mg/kg; inhalation rat LC50: 550 ug/m3; irritation: eye rabbit: 500 mg/24H mild
Toxicological Findings:
Investigated as a tumorigen, mutagen, and reproductive effectors.

SECTION 12 – ECOLOGICAL INFORMATION

In water, sodium nitrite dissociates completely and under aerobic conditions, the nitrite ions are oxidized to nitrates. Also, sodium nitrite is harmful to aquatic life in very low concentrations.

SECTION 13 – DISPOSAL CONSIDERATIONS

EPA Waste Numbers:
Not Available
Treatment:
Specified Technology – Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT A PERMITTED WASTE DISPOSAL SITE (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE, AND COUNTRY REGULATIONS.

SECTION 14 – TRANSPORT INFORMATION

DOT Proper Shipping Name:
Sodium Nitrite
DOT ID Number:
UN1500

SECTION 15 – REGULATORY INFORMATION

European Information:
R 25: Toxic if swallowed
R 8: Contact with combustible material may cause fire
R 50: Very toxic to aquatic organisms
S 45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S 61: Avoid release to the environment.

Avoid contact with skin and eyes.

Reviews, Standards, and Regulations:
OEL=MAK
EPA FIFRA 1988 Pesticide subject to registration or re-registration FEREAC 54, 7740, 1989
U.S. Information:
This product is subject to SARA Section 313 reporting requirements.

SECTION 16 – OTHER INFORMATION

Comments:
None
NFPA Hazard Ratings:

Health:	3
Flammability:	0
Reactivity:	1
Special Hazards:	Oxidizer