ADVANCED ANALYTICAL TECHNOLOGIES, INC.

Safety Data Sheet
DNF-368 Small RNA Diluent Marker

SECTION 1: Identification

1.1 Product identifier

Product name: DNF-368 Small RNA Diluent Marker

1.2 Recommended use of the chemical and restrictions on use

For Research and Development/Experimental Use Only

1.3 Supplier’s details

Name: Advanced Analytical Technologies, Inc.
Address: 2450 SE Oak Tree Ct.
         Suite 101
         Ankeny, IA 50021
         USA

Telephone: 515-964-8500
Fax: 515-964-7377

1.4 Emergency phone number(s)

515-964-8500 (Monday-Friday 8:00AM-5:00PM CST)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)
- Carcinogenicity (chapter 3.6), Cat. 2
- Repr. 1B
- Specific target organ toxicity, repeated exposure, Oral, Blood (chapter 3.9), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram
Signal word | Danger
--- | ---
Hazard statement(s) | May damage the unborn child.
H360D | Suspected of causing cancer.
H351 | May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.
H373 | Precautionary statement(s)
P201 | Obtain special instructions before use.
P202 | Do not handle until all safety precautions have been read and understood.
P308+P313 | IF exposed or concerned: Get medical advice/attention.
P405 | Store locked up.
P501 | Dispose of contents/container to an approved waste disposal plant.
P260 | Do not breathe dust/fume/gas/mist/vapours/spray.
P280 | Wear protective gloves/protective clothing/eye protection/face protection.

2.3 Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. FORMAMIDE
Concentration | 30 - 50 %*
Other names / synonyms | CARBAMALDEHYDE; METHANAMIDE
EC no. | 200-842-0
CAS no. | 75-12-7
Index no. | 616-052-00-8

Other Components

2. WATER
Concentration | > 50 %*
Other names / synonyms | DIHYDROGEN OXIDE; HYDROGEN OXIDE
CAS no. | 7732-18-5

3. Proprietary non-hazardous ingredients*
Concentration | < 0.5 %*

Trade secret statement (OSHA 1910.1200(i))
*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice | Move out of dangerous area. 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 Flush eyes with water as a precaution.

If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical
No data available

5.3 Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
1. FORMAMIDE (CAS: 75-12-7)
   TWA: 10.000000 ppm; USA (ACGIH)
   Eye irritation
   Liver damage
   Kidney damage
   Skin irritation
   Danger of cutaneous absorption

2. FORMAMIDE (CAS: 75-12-7)
   TWA: 10.000000 ppm 15.000000 mg/m³; USA (NIOSH)
   Potential for dermal absorption

8.2 Appropriate engineering controls
   Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

   Eye/face protection
   Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

   Skin protection
   Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

   Body protection
   Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

   Respiratory protection
   Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

   Environmental exposure controls
   Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

   Information on basic physical and chemical properties

   Appearance/form       Clear, colorless liquid
   Odor                  Slight odor
   Odor threshold        No data available
   pH                    No data available
   Melting point/freezing point  No data available
   Initial boiling point and boiling range No data available
   Flash point           No data available
   Evaporation rate      No data available
   Flammability (solid, gas) No data available
   Upper/lower flammability limits No data available
   Upper/lower explosive limits No data available
   Vapor pressure        No data available
Vapor density: No data available
Relative density: 1g/cm³
Solubility: Completely miscible in water
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Acids, bases, oxidizing agents

10.6 Hazardous decomposition products
Carbon oxides, nitrogen oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
Presumed human reproductive toxicant

STOT-single exposure
No data available

STOT-repeated exposure
Oral - May cause damage to organs through prolonged or repeated exposure. - Blood

Aspiration hazard
No data available

SECTION 12: Ecological information

Toxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects
No data available

SECTION 13: Disposal considerations

Disposal of the product
Dispose of unused product, residues, and containers according to local, regional, state and national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Disposal of contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information
DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards
Chronic Health Hazard

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components
Formamide 75-12-7

New Jersey Right To Know Components
Formamide 75-12-7

Pennsylvania Right To Know Components
Formamide 75-12-7

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Revision date: August 28, 2015

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Responsibility for SDS:
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