Genemed AEC Substrate

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 01/15/2025
Revision date: N/A Version: A

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Genemed AEC Substrate
Product code	:	10-0005, 10-0047

1.2. Recommended use and restrictions on use

For laboratory use only

1.3. Supplier

Sakura Finetek USA Inc.
1750 West 214th St.
Torrance, CA 90501
T 1-310-972-7800

1.4. Emergency telephone number

CHEMTREC 1-800-424-9300
Email: SDSsupport@sakuraus.com

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

-Acute toxicity, inhalation, Cat. 5
-Toxic to reproduction, Cat. 1A

2.2. GHS Label elements, including precautionary statements

GHS US labeling	
Signal word	Danger
Hazard statement(s)	H360 May damage fertility or the unborn child
Precautionary statement(s)	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection. P308+P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up. P501 Dispose of contents/container to a licensed disposal company.

2.3. Other hazards which do not result in classification

None known

2.4. Unknown acute toxicity (GHS US)

None

SECTION 3: Composition/Information on ingredients

3.1. Substances

Mixtures

3.2. Mixtures

Name	CAS Number	%
N,N-DIMETHYLFORMAMIDE	68-12-2	5 % (weight)
3-AMINO-9-ETHYLCARBAZOLE	132-32-1	Proprietary*

*The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets.
This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move to fresh air

First-aid measures after skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

First-aid measures after eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects (acute and delayed)

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

Enter available informaiton SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Carbon oxides, nitrogen oxides

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

6.1.2. For emergency responders

Protective equipment	:	Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Beware of vapours accumulating to form hazardous concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2. Environmental precautions

None Known

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep container tightly closed in a dry and well-ventilated place. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TWA (Inhalation): 10 ppm, 25 mg/m3; USA (NIOSH)
USA. NIOSH Recommended
Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

N, N-DIMETHYLFORMAMIDE (CAS: 68-12-2)
PEL (Inhalation): 10 ppm (OSHA); PEL (Inhalation): 30 mg/m3 (OSHA); REL (Inhalation): 10 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
Environmental exposure controls	:	No data available.

8.3. Individual protection measures/Personal protective equipment

Hand 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.

Eye protection:
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body 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.

Respiratory protection:
Use appropreate respiratory protection. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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).

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	pale yellow to brown
Odor	:	No data available
Odor threshold	:	No data available
pH	:	5
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability	:	Not flammable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	soluble
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

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

None under normal use conditions.

10.4. Conditions to avoid

Avoid storing in extremes of temperature.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

Oxides of carbon, and nitrogen

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Dimethyl formamide Oral LD50- 2800 mg/kg (Rat) 3-amino-9-ethyl carbazole Oral LD50- 144 mg/kg (Rat)
Acute toxicity (dermal)	:	Dimethyl formamide Dermal LD50- 1100 mg/kg (Rat)
Acute toxicity (inhalation)	:	The ATE (gas inhalation) of the mixture is: 90000 ppmV Dimethyl formamide InhalationLC50- > 5.85 mg/L (Rat) 4h
Skin corrosion/irritation	:	No information available
Serious eye damage/irritation	:	Causes eye irritation.
Respiratory or skin sensitization	:	No data available
Germ cell mutagenicity	:	No data available
Carcinogenicity	:	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.
Reproductive toxicity	:	May damage fertility or the unborn child
STOT-single exposure	:	No data available
STOT-repeated exposure	:	No data available
Aspiration hazard	:	No data available
Viscosity, kinematic	:	No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Dimethyl formamide: Algae/aquatic plants:EC50: >500mg/L (96h, Desmodesmus subspicatus) Fish: LC50: =6300mg/L (96h, Lepomis macrochirus); LC50: =9800mg/L (96h, Oncorhynchus mykiss); LC50: =10410mg/L (96h, Pimephales promelas) Crustacea: - EC50: =7500mg/L(48h,Daphniamagna)EC50: =8485mg/L(48h,Daphniamagna) EC50: 6800- 13900mg/L(48h, Daphniamagna)

12.2. Persistence and degradability

No data available on product

12.3. Bioaccumulative potential

Dimethyl formamide: Partition coefficient: -1.028

12.4. Mobility in soil

No data available on product.

12.5. Other adverse effects

No data available on product

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/ container in accordance with the local/regional/national/international regulations. Dispose of as unused product.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not dangerous goods

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not dangerous goods
Proper Shipping Name (IMDG) : Not dangerous goods
Proper Shipping Name (IATA) : Not dangerous goods

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not dangerous goods

IMDG
Transport hazard class(es) (IMDG) : Not dangerous goods

IATA
Transport hazard class(es) (IATA) : Not dangerous goods

14.4. Packing group

Packing group (DOT) : Not dangerous goods
Packing group (IMDG) : Not dangerous goods
Packing group (IATA) : Not dangerous goods

14.5. Environmental hazards

Other information : Not dangerous goods

14.6. Special precautions for user

DOT
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not dangerous goods

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA 302 Components

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

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, 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.

15.2. International regulations

Canadian Domestic Substances List (DSL)

Chemical name: Formamide, N,N-dimethyl-
CAS: 68-12-2

Canadian Non-Domestic Substances List (NDSL)

Chemical name: 9H-Carbazol-3-amine, 9-ethyl-
CAS: 132-32-1

15.3. US State regulations

Massachusetts Right To Know Components

Chemical name: Dimethylformamide
CAS number: 68-12-2

New Jersey Right To Know Components

Common name: DIMETHYLFORMAMIDE
CAS number: 68-12-2

Pennsylvania Right To Know Components

Chemical name: Formamide, N,n-dimethyl-
CAS number: 68-12-2

California Prop. 65 components

Chemical name: N,N-DIMETHYLFORMAMIDE
CAS number: 68-12-2

SECTION 16: Other information

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Sakura Finetek USA, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.