PM31 Res. No. 1100-82

ACCEPTED

JUL 3 1 1997

Under the Federal Insecticities, Pungicide, and Rodentarde Act, as amended, for the posicide registered under EPA Reg. No. 100-70



HÜLS AMERICA INC.

PRODUCT DATA BULLETIN

NUOSEPT 95 PRESERVATIVE

Turner Place, P.O. Box 365 Piscotaway NJ 08855-0365 Tel: (906, 981-5000 Telex ITT: 4754188

PRESERVATIVE FOR AQUEOUS PRODUCTS

EPA REGISTRATION NO. 1100-62

GENERAL DESCRIPTION

1

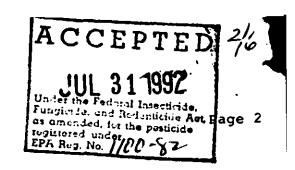
MUOSEPT 95 Preservative is a 50% aqueous solution of non-metallic, non-chlorinated organic compounds designed for use as a preservative in water-based products. NUOSEPT 95 Preservative effectively prevents deterioration and spoilage during the manufacture, storage and service of products such as latex paints, latex emulsions, pigment dispersions and slurries, inks, adhesives, caulks, sealants, metalworking fluids, paper coatings, drilling muds and flooding fluids. For example, the use of NUOSEPT 95 Preservative in latex paints will prevent bacterial decomposition of the paint during manufacture and storage without adversely affecting the physical properties, paint application characteristics or dry film performance. NUOSEPT 95 Preservative is non-yellowing and can be added at any point during paint manufacture.

TYPICAL PROPERTIES

Active Ingredients (CAS No. 56709-13-8):				
5-Hydroxymethoxymethyl-1-a22-3,7-dioxabicyclo[3.3.0	}octane24.5%			
5-Hydroxymethyl-1-aza-3,7-dioxabicyclo[3.3.0]octane				
5-Hydroxypoly[methyleneoxy(74% C2, 21% C3, 4% C4, 1				
methyl-1-aza-3,7-dioxabicyclo[3.3.0]octare				
Total Actives (Total Solids), minimum	50.0%			
Appearance	Clear, pale yellow liquid			
Odor	Mild, characteristic			
Color (APHA)				
Viscosity (25°C, cSt)				
Specific Gravity (25°/25°C)				
Pounds per Gallon				
Refractive Index (25°C)				
рн				
Flash Point (SCC)				
	* * *			
	••••			

 $^{^{}f \Phi}$ Registered U.S. Trademark of Hüls America Inc.





NUOSEPT® 95 Preservative

SOLUBILITY (Active ingredients, grams/100 grams at 25°C)

Water, methanol, ethanol, acetone, chloroform, ethylene glycol:

soluble in all proportions.

 Hexane
 - 0.2

 Petroleum ether
 - 0.2

 Xylene
 - 1.5

 Benzene
 - 2.8

 Ethyl ether
 - 28.0

STABILITY

Stable under normal conditions of storage. Protect from freezing.

RECOMMENDED USE BY INDUSTRY

A. Adhesive

Adhesives based on natural products such as starch and dextrin are readily degradable. To protect these adhesives during manufacture and storage, NUOSEPT 9: Preservative is recommended at 0.2 to 0.5 weight percent.

Those adhesives based on latex emulsions are also subject to spoilage. However, the severity of the spoilage depends on the resin type, organic additives and the pH. Typical use-levels of NUOSEPT 95 Preservative in these systems range from 0.1 to 0.5 weight percent.

B. Construction Materials

Latex based caulks and sealants are used to seal joints or void: against water, air, dust and sound. They are often supplied as knife or gun-grac compounds for ease of application. To protect these materials during manufacture and on the shelf, the use of NUOSEPT 95 Preservative at 0.1 to 0.5 weight percent is recommended.

C. Later Emulsion

Raw latex emulsions e.g., polyvinyl acetate or acrylic, can support microbial growth during transport and storage. NUOSEPT 95 Preservative at a use level of 0.05 to 0.2 percent by weight is recommended.

D. Ink

The shelf of water-based fountain pen and printing inks can be increased, by the addition of NUOSEPT 95 Preservative at 0.1 to 0.5 weight become

NUOSEPT 95 Preservative

Under the Federal Insecution Fungicide, and Rodenticide fiet, as amended, for the pesticide registered under EPA Reg. No. 1. 100-82

E. Paint

Latex paints are susceptible to microbial spoilage. For example bacterial degradation of cellulosic thickened paints can cause thin unacceptably low viscosities. NUOSEPT 95 Preservative at 0.1 to 0.5 by weight will prevent the microbial deterioration of latex paints.

F. Petroleum Production and Recovery

NUOSEPT 95 Preservative at 0.1 to 0.2 weight percent is recommended preservation of drilling muds. Fluids used to flood strata f secondary recovery of petroleum should contain 0.05 to 0.1 weight NUOSEPT 95 Preservative.

G. Pigment Dispersion and Slurry

Clay and titanium dioxide slurries, and dispersions of organic prequire protection against deterioration of dispersants and other add NUOSEPT 95 Preservative adequately protects these systems at concent of 0.05 to 0.2 weight percent.

H. Pulp and Paper

Treated paper and paperboard intended for producing, manufact packaging, processing, treating or preparing food products must be to contact with dry food.

Paper coatings and printing colors based on natural products such as should be protected with 0.2 to 0.5 weight percent NUOSEPT 95 Preserva

Products based on latex emulsions are less susceptible to spoilage; quently, the use of 0.1-0.3 weight percent NUOSEPT 95 Preservative recommended.

I. Metalworking Fluids

To prevent the spoilage of metalworking fluids, NUOSEPT 95 Preservative recommended at use-levels of 0.1 to 0.3 percent based on the weight diluted fluid. Similar levels are recommended for use in recirc systems.

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ACCEPTED 4/6

Under the Federal InsecticRage 4
Fungicide, and Rodenticide Act, as amonded; for the pesticide registered under EPA Reg. No.

NUOSEPT® 95 Preservative

USE LEVEL SUMMARY

		Recommended Use-Level (1)	•
		of NUOSEPT 95	
End Use	Reason for Treatment	Preservative	Point of Addition
Adhesive (Natural-Based)	To prevent spoilage during manufacture and storage.	0.2 - 0.5	Add to water phase or post add.
Adhesive (Synthetic)	To prevent spoilage during manufacture and storage.	0.1 - 0.5	Add to water phase or post add.
Caulks	To increase shelf-life.	0.1 - 0.5	Add to water phase during manufacture.
Drilling Muds	To prevent spoilage during manufacture, storage and service.	0.05 - 0.2	Add to water phase or post add.
Frooding Fluids	To prevent spoilage during storage and service.	0.01 - 0.1	Post addition.
Latex Emulsion	To prevent spoilage during transit and storage.	0.05 - 0.3	Post addition.
Latex Paint	To prevent spoilage during manufacture and to increase shelf-life.	0.1 - 0.5	Add at any point during manufacture.
Inks	To prevent spoilage during storage and service.	0.1 - 0.5	Post addition.
Paper Coatings	To prevent spoilage during manufacture and storage.	0.1 - 0.5	Add to water phase or post add.
Pigment Dispersion	To increase shelf life.	0.1 - 0.3	Add at any point during manufacture.
Pigment Slurry	To prevent spoilage during transit and storage.	0.05 - 0.1	Add to water phase or post add.
Sealarts	To increase shelf-life.	0.1 - 0.5	Add to water phase during manufacture.
Metalworking Fluids •••	**To protect during manufacture and service.	0.1 - 0.3	Add to water phase or post add.

(1) Percent by weight of formulation. The coptimum amount of NUOSEPT 95 Preservative required for adequate preservation is best determined by conducting a series of test loadings and making any subsequent adjustments.

The maximum I vel permitted for metalworking fluids is 0.3%. The maximum

HAZARDOUS PROPERTIES

JUL 3 1 1992
Under the Federal Insecticide.
Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

<u>DANGER!</u> - NUOSEPT 95 Preservative causes eye damage. May cause skin irritation.

Do not get in eyes, on skin, or on clothing. Wear rigles and rubber gloves. Avoid breathing vapor or spray mist. Use with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

This pesticide is toxic to fish. Do not discharge into lakes, streams, ponds or public waters unless in accordance with an NPDES Permit. Do not apply in marine and/or estuarine oil fields. Do not contaminate water by cleaning of equipment or by disposing of wastes.

Keep away from heat and flame. In case of fire, use water spray, foam carbon dioxide or dry chemical.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: - Flush with plenty of water for 15 minutes. Call a physician.

IF SWALLOWED: - Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: - Wash with soap and water. Call a physician if irritation develops.

IF INHALED: - Remove victim to fresh air. Give artificial respiration or oxygen if needed. Call a physician.

STORAGE AND DISPOSAL

Storage - Store indoors in a cool, dry place. Protect from heat and flame. Keep from freezing. Wear organic vapor respirator, face shield and rubber gloves when opening container and transferring contents. Reseal opened container. If pesticide is spilled, extinguish sources of ignition, ventilate area and cover spill with inert absorbent material. Sweep up and dispose of as below.

Pesticide Disposal - Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the dazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, dr. by other procedures approved by state and local authorities.

NUOSEPT® 95 Preservative

SHIPPING INFORMATION

Combustible liquid. NOS, NA 1993

Shipping Point - Elizabeth, New Jersey

Container - Non-returnable steel drums

1100-85 1et

HÜLS AMERICA No.

Under the Federal Insecticities. Fungicide, and Rodenticide Ast, as amended, for the posticide registered under EPA Reg. No. 1100-Year

PRODUCT DATA BULLETIN

NUOSEPT® 95 PRESERVATIVE

Turner Place, P.O. Box 365 Piscataway NJ 08855-0365 Tel: (908) 981-5000

Telex ITT: 4754188

PRESERVATIVE FOR AQUEOUS PRODUCTS

EPA REGISTRATION NO. 1100-82

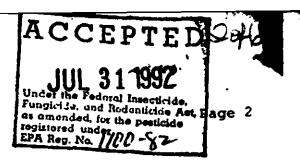
GENERAL DESCRIPTION

NUOSEPT 95 Preservative is a 50% aqueous solution of non-metallic, non-chlorinated organic compounds designed for use as a preservative in water-based products. NUOSEPT 95 Preservative effectively prevents deterioration and spoilage during the manufacture, storage and service of products such as latex paints, latex emulsions, pigment dispersions and slurries, inks, adhesives, caulks, sealants, metalworking fluids, paper coatings, drilling muds and flooding fluids. For example, the use of NUOSEPT 95 Preservative in latex paints will prevent bacterial decomposition of the paint during manufacture and storage without adversely affecting the physical properties, paint application characteristics or dry film performance. NUOSEPT 95 Preservative is non-yellowing and can be added at any point during paint manufacture.

TYPICAL PROPERTIES

Active Ingredients (CAS No. 56709-13-8):				
5-Hydroxymethoxymethyl-1-aza-3,7-dioxabicyclo[3.3.0]octane24.5%				
5-Hydroxymethyl-1-aza-3,7-dioxabicyclo(3.3.0)octane				
5-Hydroxypoly[methyleneoxy(74% C_2 , 21% C_3 , 4% C_4 , 1% C_5)]-				
methyl-1-aza-3,7-dioxabicyclo[3.3.0]octane				
Total Actives (Total Solids), minimum				
Appearance				
OdorMild, characteristic				
Color (APHA)				
Viscosity (25°C, cSt)				
Specific Gravity (25*/25*C)1.137				
Pounds per Gallon9.5				
Refractive Index (25°C)				
рн5-7				
Flash Point (SCC)140°F				
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Registered U.S. Trademark of Hüls America Inc.



NUOSEPT® 95 Preservative

SOLUBILITY (Active ingredients, grams/100 grams at 25°C)

Water, methanol, ethanol, acetone, chloroform, ethylene glycol:

- soluble in all proportions.

 Hexane
 - 0.2

 Petroleum ether
 - 0.2

 Xylene
 - 1.5

 Benzene
 - 2.8

 Ethyl ether
 - 28.0

STABILITY

Stable under normal conditions of storage. Protect from freezing.

RECOMMENDED USE BY INDUSTRY

A. Adhesive

Adhesives based on natural products such as starch and dextrin are readily degradable. To protect these adhesives during manufacture and storage, NUOSEPT 95 Preservative is recommended at 0.2 to 0.5 weight percent.

Those adhesives based on latex emulsions are also subject to spoilage. However, the severity of the spoilage depends on the resin type, organic additives and the pH. Typical use-levels of NUOSEPT 95 Preservative in these systems range from 0.1 to 0.5 weight percent.

B. Construction Materials

Latex based caulks and sealants are used to seal joints or voids against water, air, dust and sound. They are often supplied as knife or gun-grad compounds for ease of application. To protect these materials during manufacture and on the shelf, the use of NUOSEPT 95 Preservative at 0.1 to 0.5 weight percent is recommended.

C. Latex Emulsion

Raw latex emulsions, e.g., polyvinyl acetate or acrylic, can support microbial growth during transport and storage. NUOSEPT 95 Preservative at a use level of 0.05 to 0.2 percent by weight is recommended.

D. Ink

The shelf 1 1 1 fe of water-based fountain pen and printing inks can be increased, My, the addition of NUOSEPT 95 Preservative at 0.1 to 0.5 weight Parcent.

E. Paint

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Latex paints are susceptible to microbial spoilage. For example, the bacterial degradation of cellulosic thickened paints can cause thinning to unacceptably low viscosities. NUOSEPT 95 Preservative at 0.1 to 0.5 percent by weight will prevent the microbial deterioration of latex paints.

F. Petroleum Production and Recovery

NUOSEPT 95 Preservative at 0.1 to 0.2 weight percent is recommended for the preservation of drilling muds. Fluids used to flood strata for the secondary recovery of petroleum should contain 0.05 to 0.1 weight percent NUOSEPT 95 Preservative.

G. Pigment Dispersion and Slurry

Clay and titanium dioxide slurries, and dispersions of organic pigments require protection against deterioration of dispersants and other additives (NUOSEPT 95 Preservative adequately protects these systems at concentrations of 0.05 to 0.2 weight percent.

H. Pulp and Paper

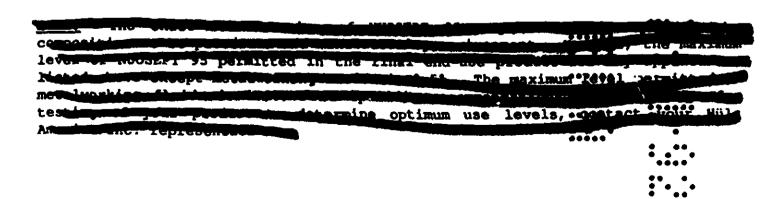
Treated paper and paperboard intended for producing, manufacturing, packaging, processing, treating or preparing food products must be limited to contact with dry food.

Paper coatings and printing colors based on natural products such as starch should be protected with 0.2 to 0.5 weight percent NUOSEPT 95 Preservative.

Products based on latex emulsions are less susceptible to spoilage; consequently, the use of 0.1-0.3 weight percent NUOSEPT 95 Preservative is recommended.

I. Metalworking Fluids

To prevent the spoilage of metalworking fluids, NUOSEPT 95 Preservative is recommended at use-levels of 0.1 to 0.3 percent based on the weight of the diluted fluid. Similar levels are recommended for use in recirculating systems.







Under the Federal InsecticPings Fungicide, and Rodenticide Ast, es amended, for the pesticide tegistered under EPA Reg. No.

USE LEVEL SUMMARY

		Recommended Use-Level (1) of NUOSEPT 95	
End_Use_	Reason for Treatment	Preservative	Point of Addition
Adhesive (Natural-Based)	To prevent spoilage during manufacture and storage.	0.2 - 0.5	Add to water phase or post add.
Adhesive (Synthetic)	To prevent spoilage during manufacture and storage.	0.1 - 0.5	Add to water phase or post add.
Caulks	To increase shelf-life.	0.1 - 0.5	Add to water phase during manufacture.
Drilling Muds	To prevent spoilage during manufacture, storage and serv:	0.05 - 0.2	Add to water phase or post add.
Flooding Fluids	To prevent spoilage during storage and service.	0.01 - 0.1	Post addition.
Latex Emulsion	To prevent spoilage during transit and storage.	0.05 - 0.3	Post addition.
Latex Paint	To prevent spoilage during manufacture and to increase shelf-life.	0.1 - 0.5	Add at any point during manufacture.
Inks	To prevent spoilage during storage and service.	0.1 - 0.5	Post addition.
Paper Coatings	To prevent spoilage during manufacture and storage.	0.1 - 0.5	Add to water phase or post add.
Pigment Dispersion	To increase shelf life.	0.1 - 0.3	Add at any point during manufacture.
Pigment Slurry	To prevent spoilage during transit and storage.	0.05 - 0.1	Add to water phase or post add.
Sealants	To increase shelf-life.	0.1 - 0.5	Add to water phase during manufacture.
Metalworking Fluids	**To protect during manufacture and service.	0.1 - 0.3	Add to water phase or post add

⁽¹⁾ Percent by weight of formulation. The coptimum amount of NUOSEPT 95 Propervative required for adequate preservation is best determined by conducting a series of test loadings and making any subsequent adjustments.

The maximum level permitted for metalworking fluids is 0.3%. The maximum level permitted for all other applications listed above is 0.5%.

HAZARDOUS PROPERTIES

JUL 3 1 1992
Under the Federal Insecticide.
Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 1/100-672-

DANGER! - NUOSEPT 95 Preservative causes eye damage. May cause skin irritation. Harmful if swallowed.

Do not get in eyes, on skin, or on clothing. Wear goggles and rubber gloves. Avoid breathing vapor or spray mist. Use with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

This pesticide is toxic to fish. Do not discharge into lakes, streams, ponds or public waters unless in accordance with an NPDES Permit. Do not apply in marine and/or estuarine oil fields. Do not contaminate water by cleaning of equipment or by disposing of wastes.

Keep away from heat and flame. In case of fire, use water spray, foam carbon dioxide or dry chemical.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: - Flush with plenty of water for 15 minutes. Call a physician.

IF SWALLOWED: - Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: - Wash with soap and water. Call a physician if irritation develops.

IF INHALED: - Remove victim to fresh air. Give artificial respiration or oxygen if needed. Call a physician.

STORAGE AND DISPOSAL

Storage - Store indoors in a cool, dry place. Protect from heat and flame. Keep from freezing. Wear organic vapor respirator, face shield and rubber gloves when opening container and transferring contents. Reseal opened container. If pesticide is spilled, extinguish sources of ignition, ventilate area and cover spill with inert absorbent material. Sweep up and dispose of as below.

Pesticide Disposal - Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal daw. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the dazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or By other procedures approved by state and local authorities.

NUOSEPT 95 Preservative

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SHIPPING INFORMATION

Combustible liquid. NOS, NA 1993

Shipping Point - Elizabeth, New Jersey

Container - Non-returnable steel drums

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