SAFETY DATA SHEET

Issue Date 20-Nov-2013 **Revision Date** 25-Aug-2015 **Version** 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name (Chemical Name) : **1,4-Dihydro-2,6-dimethyl-3,5-dicarbododecyloxypyridine**

1.2. Details of the supplier of the safety data sheet

Supplier

Nanjing MSN Chemical CO.,LTD
827Ruikai Building,101Xiaoshan Road
Liuhe Nanjing City
Jiangsu
China

For further information, please contact

Contact Point TEL: 86-25-57015632
FAX: 86-25-57019235

E-mail address sales@msnchem.com

1.3. Emergency telephone number

Emergency Telephone +86-25-57015632

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

This substance is not classified as dangerous according to 67/548/EEC
Full text of R-phrases: see section 16

Hazard symbols
Not dangerous

2.2. Label elements

Product identifier
Contains Methenamine
EUH210 - Safety data sheet available on request
EUH208 - Contains (Methenamine). May produce an allergic reaction

2.3. Other hazards

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC No	CAS No	Weight-%	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Didodecyl 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate	252-939-2	36265-41-5	99.85	-	-
Methenamine	202-905-8	100-97-0	<0.15	F; R11 R43	Skin Sens. 1 (H317) Flam. Sol. 2 (H228)

Full text of R-phrases: see section 16

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Remove to fresh air. (Get medical attention immediately if symptoms occur.).

Skin Contact Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Consult a physician if necessary.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire

5.2. Special hazards arising from the substance or mixture

Avoid creating dust. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Do not allow run-off from fire-fighting to enter drains or water courses.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas. Avoid creating dust. Dust can form an explosive mixture with air.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional ecological information. The product is insoluble and floats on water. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Pick up and transfer to properly labeled containers.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations
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.

7.3. Specific end use(s)

Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits	Exposure limits are listed below, if they exist.

Chemical Name	PMC OEL
Didodecyl 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate 36265-41-5	TWA: 10 mg/m^3 Inhl TWA: 3 mg/m^3 Resp
Methenamine 100-97-0	-

Derived No Effect Level (DNEL)

Chemical Name	End Use	Inhalation	Oral	Dermal
Didodecyl 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate 36265-41-5	Workers			
Methenamine 100-97-0	Workers			

Chemical Name	End Use	Inhalation	Oral	Dermal
Didodecyl 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate 36265-41-5	Consumer use			
Methenamine 100-97-0	Consumer use			

Predicted No Effect Concentration (PNEC)

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Environmental exposure controls Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance powder

Color yellow

Odor characteristic

Odor threshold No information available

Property	Values	Remarks · Method
pH		No information available
Melting point/freezing point	93 °C / 199 °F	
Boiling point / boiling range		No information available
Flash point	> 250 °C / > 482 °F	Calculation method (with decomposition)
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		No information available
Lower flammability limit:		No information available
Vapor pressure		No information available
Vapor density		No information available

Specific Gravity		No information available
Water solubility	Insoluble in water	
Solubility(ies)		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature	> 250°C/482°F	
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties	Dust can form an explosive mixture with air	
Oxidizing properties	No information available	

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	345 kg/m_3

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

10.3. Possibility of hazardous reactions

Hazardous polymerization
Hazardous polymerization does not occur.

Possibility of Hazardous Reactions,
None under normal processing.

10.4. Conditions to avoid

Avoid creating dust. Dust can form an explosive mixture with air. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible with oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information	The product has not been tested.
Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	Dust contact with the eyes can lead to mechanical irritation.

Skin Contact Substance may cause slight skin irritation. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion No data available.

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methenamine	= 9200 mg/kg (Rat)		

Skin corrosion/irritation No information available

Serious eye damage/eye irritation No information available

Sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No known effect.

Carcinogenicity None known.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure None known.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

99.8% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methenamine		44600 - 55600: 96 h Pimephales promelas mg/L LC50 flow-through	29868 - 43390: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Avoid release to the environment

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.
Waste codes / waste designations according to EWC / AVV	Waste codes should be assigned by the user based on the application for which the product was used

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID No.	Not regulated
14.2	
14.3	
14.4	
14.5	
14.6	
14.7	
Flash point °C	250

RID

14.1 UN/ID No.	Not regulated
14.2	
14.3	
14.4	
14.5	
14.6	

ADR

14.1 UN/ID No.	Not regulated
14.2	
14.3	
14.4	
14.5	
14.6	

IATA

14.1	
14.2 Proper shipping name	Not regulated
14.3	
14.4	
14.5	
14.6	

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

EINECS/ELINCS	Complies or Exempt
TSCA	Complies
AICS	Complies
DSL/NDSL	Does not comply
ENCS	Does not comply
KECL	Does not comply
PICCS	Complies
IECSC	Complies
NZIoC	Does not comply
TCSI	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

The details contained herein are based on our present state of knowledge and experience and are to characterize our product with regard to any possible safety requirements.
We do, however, pass them on without any warranty or property assurances.

End of Safety Data Sheet