

# Safety Data Sheet

According to Globally Harmonized System Of Classification And Labelling Of Chemicals (GHS)

Version: 1.0/EN

Product name: HARTCURE MMEA

Revision date: 03/28/2024

Printing date: 03/28/2024

## SECTION 1 Chemical product and company identification

|                              |   |   |
|------------------------------|---|---|
| Product name                 | : | HARTCURE MMEA   |
| Chemical name (English name) | : | 4,4'-Diamino-3,3'Diethyl-5,5'-Dimethyldiphenyl Methane<br>4,4'-Methylenebis(2-ethyl-6-methylaniline)      |
| Name of company              | : | Shandong Johnson Fine Chemical Co., Ltd.  |
| Address                      | : | NO.06933 Huanghexi Street Binhai Economic-Techological<br>Development Area, Weifang City, Shandong, China |
| Zip code                     | : | 263737  |
| Tel.                         | : | 0536-5319217  |
| E-mail                       | : | jfchem@johnson-fine.com   |
| Emergency number             | : | 0536-5307299  |
| Recommended uses             | : | Polyurethane curing agent, epoxy resin curing agent   |
| Restrictions on use          | : | No information available  |

## SECTION 2 Hazards identification

### Emergency overview

No information available

#### GHS classification

Other hazards not mentioned above are Not applicable or No data is available.

#### Label elements

Hazard pictograms (GHS CN) : None.

Signal word (GHS CN) : None.

Hazard statements (GHS CN) : None.

Precautionary statements (GHS CN): None.

#### Physical and chemical hazards

No information available

#### Health hazards

Toxicity hazard : No information available

Most Important Symptoms/Effects : No additional information available

#### Environmental hazards

No information available

#### Other hazards

None

## SECTION 3 Composition/information on ingredients

| Name   | CAS No.    | Concentration (%) |
|--|------------|-------------------|
| 4,4'-Diamino-3,3'Diethyl-5,5'-Dimethyldiphenyl Methane; 4,4'-Methylenebis(2-ethyl-6-methylaniline) | 19900-72-2 | 100               |

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## SECTION 4 First aid measures

### Emergency

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water  
First-aid measures after eye contact : Rinse eyes with water as a precaution  
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell

### Most Important Symptoms/Effects

No additional information available

### Personal Protection in First Aid and Measures

No additional information available.

### Notes for the doctor

Other medical advice or treatment : Treat symptomatically

## SECTION 5 Fire fighting measures

### Extinguishing media

Suitable extinguishing media : Water spray, Dry powder, Foam  
Unsuitable extinguishing media : No additional information available

### Special hazard

Hazardous decomposition products in case of fire : Toxic fumes may be released

### Advice for firefighters and protective measures

Firefighting instructions : No additional information available  
Protection during firefighting : Do not attempt to take action without suitable protective equipment  
Self-contained breathing apparatus  
Complete protective clothing

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

General measures : No additional information available  
Personal Precautions, Protective Equipment and Emergency Procedures : No additional information available

### For non-emergency personnel

Emergency procedures : Ventilate spillage area

### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment

For further information refer to section 8: "Exposure controls/personal protection"

Environmental precautions : Avoid release to the environment

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## Methods and Equipment for Containment and Cleaning up

Methods for cleaning : No additional information available

For containment : No additional information available

## Prevention Measures for Secondary Accidents

Prevention Measures for Secondary Accidents : No additional information available

Other information : Dispose of materials or solid residues at an authorized site

## SECTION 7 Handling and storage

### Handling

Precautions for safe handling : Ensure good ventilation of the work station

Wear personal protective equipment

Hygiene measures : Do not eat, drink or smoke when using this product.

Always wash hands after handling the product

Local and general ventilation : No additional information available

### Storage

Storage conditions : Store in a well-ventilated place. Keep cool.

Material used in packaging/containers : No additional information available

## SECTION 8 Exposure controls / Personal protection equipment

### Occupational Exposure Limits

No additional information available

### Biological limit values

No additional information available

### Monitoring methods

No additional information available

Engineering controls : Ensure good ventilation of the work station

### Personal protective equipment

Environmental exposure controls : Avoid release to the environment.

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

## SECTION 9 Physical and chemical properties

Physical state : Solid

Appearance : No data available

Colour : white

Odour : No data available

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Odour threshold(ppm) : No data available  
Odour threshold(mg/m<sup>3</sup>): No data available  
pH : No data available  
Evaporation rate : No data available  
Relative evaporation rate(butyl acetate=1) : No data available  
Relative evaporation rate(ether=1) : No data available  
Melting point : 83.5 -87.5 °C  
Boiling point : 443.143 °C @760 mmHg  
Flash point : 265.957 °C  
Flammability (solid, gas) : Not flammable.  
Lower explosive limit (LEL) : No data available  
Upper explosive limit (UEL) : No data available  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Relative density : Not applicable  
Density : 1.04 g/cm<sup>3</sup>  
Solubility: No data available  
Solubility in water : No data available  
Solubility in ethanol : No data available  
Solubility in ether : No data available  
Solubility in acetone : No data available  
Solubility in organic solvents : No data available  
Log Pow : No data available  
Auto-ignition temperature : Not applicable  
Decomposition temperature : No data available  
Viscosity : Not applicable

## SECTION 10 Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport  
Chemical stability : Stable under normal conditions  
Hazardous reactions : No dangerous reactions known under normal conditions of use  
Conditions to avoid: None under recommended storage and handling conditions (see section 7)  
Incompatible materials : No additional information available  
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced  
Other properties : No additional information available

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## SECTION 11 Toxicological information

Acute toxicity  
Acute toxicity (oral) : No data available  
Acute toxicity (dermal) : No data available  
Acute toxicity (inhalation) : No data available

Skin corrosion/irritation  
Skin corrosion/irritation : No data available

Serious eye damage/irritation  
Serious eye damage/irritation : No data available

Respiratory or skin sensitisation  
Respiratory or skin sensitisation : No data available

Germ cell mutagenicity  
Germ cell mutagenicity : No data available

Carcinogenicity  
Carcinogenicity : No data available

Reproductive toxicity  
Reproductive toxicity : No data available

STOT-single exposure  
STOT-single exposure : No data available

STOT-repeated exposure  
STOT-repeated exposure: No data available

Aspiration hazard  
Aspiration hazard : No data available

## SECTION 12 Ecological information

Ecotoxicity  
Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity : No data available  
Chronic aquatic toxicity : No data available  
No additional information available

Persistence and degradability  
No additional information available

Bioaccumulative potential

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No additional information available

Mobility in soil

No additional information available

Other adverse effects

Classification procedure (Ozone) : No data available

## SECTION 13 Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Contaminated container and packaging : No additional information available.

Additional information : No additional information available.

## SECTION 14 Transport information

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| Overland transport   | Transport by sea | Air transport | Inland waterway transport | Rail transport |
|--|------------------|---------------|---------------------------|----------------|
| UN number  |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| UN proper shipping name  |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| Transport document description   |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| Transport hazard class(es)   |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| Packing group  |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| Environmental hazards  |                  |               |                           |                |
| Not applicable   | Not regulated    | Not regulated | Not regulated             | Not regulated  |
| <b>Special transport precautions</b><br>Overland transport<br>Not applicable<br>Transport by sea<br>Not regulated<br>Air transport<br>Not regulated<br>Inland waterway transport<br>Not regulated<br>Rail transport<br>Not regulated |                  |               |                           |                |

## SECTION 15 Regulatory information

|   |
|---|
| Dangerous Goods List (GB 12268-2012) : Not listed   |
| Regulation on the Safety Management of Hazardous Chemicals : Not listed   |
| Rules for dangerous goods transport by railway : Not listed   |
| Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used : Not listed  |
| Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals : Not listed |
| Regulation of the People's Republic of China on the Administration of the Import and Export of Goods : Not listed                 |
| Measures for the Administration of Pharmaceutical Precursor Chemicals : Not listed  |

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Regulations on the Control of Agricultural Chemicals; Notice of Pesticide Transport: Not listed

Regulation on the Management of Controlled Chemicals : Not listed

## SECTION 16 Other information

Data sources : Loli  
ECHA reference

### Abbreviations and acronyms

|       |   |
|-------|---|
| ADN   | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways   |
| ADR   | European Agreement concerning the International Carriage of Dangerous Goods by Road               |
| ATE   | Acute Toxicity Estimate   |
| BCF   | Bioconcentration factor   |
| CLP   | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| DMEL  | Derived Minimal Effect level  |
| EC50  | Median effective concentration  |
| IARC  | International Agency for Research on Cancer   |
| IATA  | International Air Transport Association   |
| IMDG  | International Maritime Dangerous Goods  |
| LC50  | Median lethal concentration   |
| LD50  | Median lethal dose  |
| NOEC  | No-Observed Effect Concentration  |
| PBT   | Persistent Bioaccumulative Toxic  |
| PNEC  | Predicted No-Effect Concentration   |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID   | Regulations concerning the International Carriage of Dangerous Goods by Rail                      |
| SDS   | Safety Data Sheet   |
| STP   | Sewage treatment plant  |

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging

Other Regional depending information : None

Other information : None

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and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable