

## Safety Data Sheet

### MAPEPLAST 400NC (NA)

Safety Data Sheet dated: 09/24/2025 - version 6

Date of first edition: 12/21/2022



## 1. IDENTIFICATION

### Product identifier used on the label

Mixture identification:

Trade name: MAPEPLAST 400NC (NA)

Trade code: 9008609

### Recommended use of the chemical and restrictions on use

Recommended use: Admixture for concrete

Restrictions on use: Not available

### Name, U.S. address, and U.S. telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Responsible: RDProductSafety@mapei.com

### Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Reproductive toxicity, Category 2

Suspected of damaging fertility. Suspected of damaging the unborn child.

Acute aquatic hazard, category 3

Harmful to aquatic life

### Label elements

#### Hazard pictograms and Signal Word



Warning

### Hazard statements

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H402 Harmful to aquatic life

### Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

P280 Wear protective gloves/clothing and eye/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with applicable regulations.

### Hazards associated with foreseeable chemical reactions

None

### Ingredient(s) with unknown acute toxicity:

None

### Hazards not otherwise classified identified during the classification process:

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Not Relevant

## Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

### List of components

| Qty           | Name                               | Ident. Numb.                                              | Classification                                                                                                   |
|---------------|------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| ≥0.1 - <0.2 % | 2,2'-iminodiethanol; dietanolamine | CAS:111-42-2<br>EC:203-868-0<br>EU CLP Index:603-071-00-1 | Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT RE 2, H373; Repr. 2, H361; Aquatic Acute 2, H401 |

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## 4. FIRST AID MEASURES

### Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

### Most important symptoms/effects, acute and delayed

Not available

### Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

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## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media:

None in particular.

### Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

### Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

### Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### Conditions for safe storage, including any incompatibilities

Store above freezing

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: Not available

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Occupational Exposure Limits (OEL)

|                                                        | OEL Type | Country     | Occupational Exposure Limit                                                                                                                                                                                      |
|--------------------------------------------------------|----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2,2'-iminodiethanol;<br>dietanolamine<br>CAS: 111-42-2 | ACGIH    |             | Long Term: 1 mg/m <sup>3</sup><br>(IFV), Skin, A3 - Liver and kidney dam                                                                                                                                         |
|                                                        | MAK      | GERMANY     | Long Term: 1 mg/m <sup>3</sup>                                                                                                                                                                                   |
|                                                        | ACGIH    |             | Long Term: 1 mg/m <sup>3</sup><br>A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;Skin - potential significant contribution to overall exposure by the cutaneous route;kidney and liver damage |
|                                                        | MAK      | AUSTRIA     | Long Term: 2 mg/m <sup>3</sup> - 0,46 ppm; Short Term: 4 mg/m <sup>3</sup> - 0,92 ppm                                                                                                                            |
|                                                        | MAK      | SWITZERLAND | Long Term: 1 mg/m <sup>3</sup>                                                                                                                                                                                   |

#### Predicted No Effect Concentration (PNEC) values

2,2'-iminodiethanol;  
dietanolamine  
CAS: 111-42-2      Exposure Route: Fresh Water; PNEC Limit: 0,021 mg/l

Exposure Route: Marine water; PNEC Limit: 0,002 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0,092 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0,009 mg/kg

Exposure Route: Soil; PNEC Limit: 1,63 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

#### Derived No Effect Level (DNEL) values

2,2'-iminodiethanol;  
dietanolamine  
CAS: 111-42-2      Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 0,13 mg/kg; Consumer: 0,07 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Industry: 1 mg/m<sup>3</sup>; Consumer: 0,25 mg/m<sup>3</sup>

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 0,06 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 0,75 mg/m<sup>3</sup>; Consumer: 0,125 mg/m<sup>3</sup>

Appropriate engineering controls: Not available

### Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                                               |                                     |
|-----------------------------------------------|-------------------------------------|
| Physical state:                               | Liquid                              |
| Appearance and colour:                        | liquid Brown                        |
| Odour:                                        | characteristic                      |
| Odour threshold:                              | Not Relevant                        |
| Melting point / freezing point:               | Not Relevant                        |
| Initial boiling point and boiling range:      | Not Relevant                        |
| Flammability:                                 | Not Relevant                        |
| Upper/lower flammability or explosive limits: | Not Relevant                        |
| Flash point:                                  | 100 °C (212 °F)                     |
| Auto-ignition temperature:                    | Not Relevant                        |
| Decomposition temperature:                    | Not Relevant                        |
| pH:                                           | 8.20                                |
| Viscosity:                                    | 65.00 mPA-s                         |
| Kinematic viscosity:                          | > 20,5 mm <sup>2</sup> /sec (40 °C) |
| Solubility in water:                          | very soluble                        |
| Solubility in oil:                            | immiscible                          |
| Partition coefficient (n-octanol/water):      | Not Relevant                        |
| Vapour pressure:                              | Not Relevant                        |
| Evaporation rate:                             | Not Relevant                        |
| Relative density:                             | 1.20 g/cm <sup>3</sup>              |
| Vapour density:                               | Not Relevant                        |

### Particle characteristics:

|                |                   |
|----------------|-------------------|
| Particle size: | No data available |
|----------------|-------------------|

### Other information

|                                       |              |
|---------------------------------------|--------------|
| Explosive properties:                 | Not Relevant |
| Oxidizing properties:                 | Not Relevant |
| Solid/gas flammability:               | Not Relevant |
| Substance Groups relevant properties: | Not Relevant |
| Miscibility:                          | Not Relevant |
| Fat Solubility:                       | Not Relevant |

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Toxicological Information of the Preparation

|                                      |                                                                                    |
|--------------------------------------|------------------------------------------------------------------------------------|
| a) acute toxicity                    | Not classified<br>Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation         | Not classified<br>Based on available data, the classification criteria are not met |
| c) serious eye damage/irritation     | Not classified<br>Based on available data, the classification criteria are not met |
| d) respiratory or skin sensitisation | Not classified<br>Based on available data, the classification criteria are not met |
| e) germ cell mutagenicity            | Not classified<br>Based on available data, the classification criteria are not met |
| f) carcinogenicity                   | Not classified<br>Based on available data, the classification criteria are not met |
| g) reproductive toxicity             | The product is classified: Reproductive toxicity, Category 2(H361)                 |
| h) STOT-single exposure              | Not classified<br>Based on available data, the classification criteria are not met |
| i) STOT-repeated exposure            | Not classified<br>Based on available data, the classification criteria are not met |
| j) aspiration hazard                 | Not classified<br>Based on available data, the classification criteria are not met |

#### Toxicological information on main components of the mixture:

|                                       |                   |                                                                                                                                                                 |
|---------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2,2'-iminodiethanol;<br>dietanolamine | a) acute toxicity | LD50 Oral Rat > 1600 mg/kg<br><br>LD50 Skin Rabbit = 8380, mg/kg<br>LD50 Skin Rabbit = 11,9 ml/kg<br>LD50 Skin Rabbit = 11,9 ml/kg<br>LD50 Oral Rat = 780 mg/kg |
|---------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Substance(s) listed on the IARC Monographs:

2,2'-iminodiethanol; dietanolamine Group 2B

#### Substance(s) listed as OSHA Carcinogen(s):

2,2'-iminodiethanol; dietanolamine

#### Substance(s) listed as NIOSH Carcinogen(s):

None

#### Substance(s) listed on the NTP report on Carcinogens:

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## 12. ECOLOGICAL INFORMATION

### Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

### List of Eco-Toxicological properties of the product

The product is classified: Acute aquatic hazard, category 3(H402)

### List of Eco-Toxicological properties of the components

| Component                          | Ident. Numb.                                                      | Ecotox Data                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2,2'-iminodiethanol; dietanolamine | CAS: 111-42-2 -<br>EINECS: 203-<br>868-0 - INDEX:<br>603-071-00-1 | a) Aquatic acute toxicity : LC50 Fish = 1480 mg/L 96<br><br>a) Aquatic acute toxicity : EC50 Algae > 9,5 mg/L 96<br>a) Aquatic acute toxicity : LC50 Fish = 1850 mg/L 48<br>a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 4460 mg/L 96h EPA<br>a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 600 mg/L 96h<br>IUCLID |

### Persistence and degradability

N.A.

### Bioaccumulative potential

N.A.

### Mobility in soil

N.A.

### Other adverse effects

N.A.

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

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## 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

### UN number

DOT-UN Number: Not Applicable

ADR-UN number: Not Applicable

IATA-Un number: Not Applicable

IMDG-Un number: Not Applicable

### UN proper shipping name

DOT-Proper Shipping Name: Not Applicable

ADR-Shipping Name: Not Applicable  
IATA-Technical name: Not Applicable  
IMDG-Technical name: Not Applicable

**Transport hazard class(es)**

DOT-Hazard Class: Not Applicable  
ADR-Class: Not Applicable  
IATA-Class: Not Applicable  
IMDG-Class: Not Applicable

**Packing group**

DOT Packing Group: Not Applicable  
ADR-Packing Group: Not Applicable  
IATA-Packing group: Not Applicable  
IMDG-Packing group: Not Applicable

**Environmental hazards**

Marine pollutant: No  
Environmental Pollutant: Not Applicable  
DOT-RQ: Yes                      DOT-RQ - Quantity: 100 lbs

**Transport in bulk according to IMO instruments**

N.A.  
Not Applicable

**Special precautions**

Department of Transportation (DOT):  
Not Applicable  
Road and Rail ( ADR-RID ) :  
Not Applicable  
Air ( IATA ) :  
Not Applicable  
Sea ( IMDG ) :  
Not Applicable

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**15. REGULATORY INFORMATION**

This Safety Data Sheet has been prepared according to the Hazard Communication Standard 2024 (HCS 2024)

**USA - Federal regulations**

**TSCA - Toxic Substances Control Act**

All the components are listed on the TSCA inventory  
**TSCA listed substances:**  
2,2'-iminodiethanol; dietanolamine is listed in TSCA Section 8b

**SARA - Superfund Amendments and Reauthorization Act**

**Section 302 - Extremely Hazardous Substances:**  
No substances listed  
**Section 304 - Hazardous substances:**  
2,2'-iminodiethanol; dietanolamine  
**Section 313 - Toxic chemical list:**  
2,2'-iminodiethanol; dietanolamine

**CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

**Substance(s) listed under CERCLA:**  
2,2'-iminodiethanol; dietanolamine                      Reportable quantity:                      100                      pounds

**CAA - Clean Air Act**

**CAA listed substances:**  
2,2'-iminodiethanol; dietanolamine is listed in CAA Section 112(b) - HAP Section 112(b) - HON

**CWA - Clean Water Act**

**CWA listed substances:**  
No substances listed

**USA - State specific regulations**

**California Proposition 65**

**Substance(s) listed under California Proposition 65:**  
2,2'-iminodiethanol; dietanolamine Listed as carcinogen

**Massachusetts Right to know**

**Substance(s) listed under Massachusetts Right to know:**

2,2'-iminodiethanol; dietanolamine

**Pennsylvania Right to know****Substance(s) listed under Pennsylvania Right to know:**

2,2'-iminodiethanol; dietanolamine

**New Jersey Right to know****Substance(s) listed under New Jersey Right to know:**

2,2'-iminodiethanol; dietanolamine

**Canada - Federal regulations****DSL - Domestic Substances List**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

This product complies with NDSL inventory

**NPRI - National Pollutant Release Inventory****NPRI (National Pollutant Release Inventory) - List of substances listed.**

No substances listed

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**16. OTHER INFORMATION**

Safety Data Sheet dated: 9/24/2025 - version 6

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

| <b>Code</b> | <b>Description</b> |
|-------------|--------------------|
|-------------|--------------------|

|      |                       |
|------|-----------------------|
| H302 | Harmful if swallowed. |
|------|-----------------------|

|      |                         |
|------|-------------------------|
| H315 | Causes skin irritation. |
|------|-------------------------|

|      |                            |
|------|----------------------------|
| H318 | Causes serious eye damage. |
|------|----------------------------|

|      |                                                      |
|------|------------------------------------------------------|
| H361 | Suspected of damaging fertility or the unborn child. |
|------|------------------------------------------------------|

|      |                                                                    |
|------|--------------------------------------------------------------------|
| H373 | May cause damage to organs through prolonged or repeated exposure. |
|------|--------------------------------------------------------------------|

|      |                       |
|------|-----------------------|
| H401 | Toxic to aquatic life |
|------|-----------------------|

| <b>Code</b> | <b>Hazard class and hazard category</b> | <b>Description</b>                                                     |
|-------------|-----------------------------------------|------------------------------------------------------------------------|
| A.1/4/Oral  | Acute Tox. 4                            | Acute toxicity (oral), Category 4                                      |
| A.2/2       | Skin Irrit. 2                           | Skin irritation, Category 2                                            |
| A.3/1       | Eye Dam. 1                              | Serious eye damage, Category 1                                         |
| A.7/2       | Repr. 2                                 | Reproductive toxicity, Category 2                                      |
| A.9/2       | STOT RE 2                               | Specific target organ toxicity following repeated exposure, Category 2 |
| US-HAE/A2   | Aquatic Acute 2                         | Acute aquatic hazard, category 2                                       |

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EU CLP Index: Index number as reported in Annex VI to EU Reg. 1272/2008

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
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