**Safety Data Sheet**
**acc. to OSHA HCS**

Printing date 04/14/2025 Reviewed on 04/14/2025

## 1 Identification

· **Product identifier**

· **Product Name: EPA Method 521 Nitrosamine Native Mix; 100 µg/mL in Dichloromethane; 1 mL**

· **Part Number:** 521-A
· **Restrictions**
This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.
· **Application of the substance / the mixture** For Laboratory Use Only
· **Uses advised against** Not for Human or Animal Use

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Spex CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
732-549-7144
USMet-CRMSales@antylia.com

· **Information department:** product safety department
· **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

## 2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS08 Health hazard

| | |
|---|---|
| Carcinogenicity 1B | H350 May cause cancer. |

GHS07

| | |
|---|---|
| Acute Toxicity - Oral 4 | H302 Harmful if swallowed. |
| Skin Irritation 2 | H315 Causes skin irritation. |
| Specific Target Organ Toxicity - Single Exposure 3 | H336 May cause drowsiness or dizziness. |

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
dichloromethane
dimethylnitrosoamine
nitrosodipropylamine
· **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H350 May cause cancer.
H336 May cause drowsiness or dizziness.
· **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P330 Rinse mouth.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.

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P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**


Health = 1
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**


Health = *1
Fire = 1
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

| · **Dangerous components:** | | |
|---|---|---|
| 75-09-2 | dichloromethane | 99.93% |
| 62-75-9 | dimethylnitrosoamine | 0.01% |
| 621-64-7 | nitrosodipropylamine | 0.01% |

| · **Chemical identification of the substance/preparation** | | |
|---|---|---|
| 55-18-5 | diethylnitrosoamine | 0.01% |
| 100-75-4 | 1-nitrosopiperidine | 0.01% |
| 924-16-3 | N-nitrosodibutylamine | 0.01% |
| 930-55-2 | 1-nitrosopyrrolidine | 0.01% |
| 10595-95-6 | N-Nitrosomethylethylamine | 0.01% |

## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Immediately rinse with water.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:**
Immediately call a doctor.
Do not give anything to eat or drink - Do not induce vomitting
· **Information for Doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

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· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

| · **PAC-1:** | | |
|---|---|---|
| 75-09-2 | dichloromethane | 200 ppm |
| 62-75-9 | dimethylnitrosoamine | 0.082 mg/m³ |
| 621-64-7 | nitrosodipropylamine | 5.6 mg/m³ |

| · **PAC-2:** | | |
|---|---|---|
| 75-09-2 | dichloromethane | 560 ppm |
| 62-75-9 | dimethylnitrosoamine | 0.57 ppm |
| 621-64-7 | nitrosodipropylamine | 16 mg/m3 |

| · **PAC-3:** | | |
|---|---|---|
| 75-09-2 | dichloromethane | 6,900 ppm |
| 62-75-9 | dimethylnitrosoamine | 3.4 ppm |
| 621-64-7 | nitrosodipropylamine | 95 mg/m³ |

## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

| **75-09-2 dichloromethane** | |
|---|---|
| PEL | Short-term value: 125 ppm<br>Long-term value: 25 ppm<br>see 29 CFR 1910.1052 |
| REL | See Pocket Guide App. A |
| TLV | Long-term value: 50 ppm<br>BEI, A3 |
| **62-75-9 dimethylnitrosoamine** | |
| PEL | see 29 CFR 1910.1003 |
| REL | See Pocket Guide App. A |
| TLV | Skin; L, A3 |

| · **Ingredients with biological limit values:** | |
|---|---|
| **75-09-2 dichloromethane** | |
| BEI | 0.3 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Dichloromethane (semi-quantitative) |

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**Product Name: EPA Method 521 Nitrosamine Native Mix; 100 µg/mL in Dichloromethane; 1 mL**

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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**
Safety glasses

Tightly sealed goggles

## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Liquid |
| **Color:** | According to product specification |
| · **Odor:** | Characteristic |
| · **Odour Threshold:** | Not applicable. |
| · **pH-value:** | Not applicable. |
| · **Change in condition** | |
| **Melting point/Melting range:** | Undetermined. |
| **Boiling point/Boiling range:** | 40 °C (104 °F) |
| · **Flash point:** | > 100 °C (> 212 °F) |
| · **Flammability:** | Not applicable. |
| · **Auto igniting:** | 605 °C (1,121 °F) |
| · **Decomposition temperature:** | Not applicable. |
| · **Ignition temperature:** | Product is not selfigniting. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Explosion limits:** | |
| **Lower:** | 13 Vol % |
| **Upper:** | 22 Vol % |
| · **Vapor pressure at 20 °C (68 °F):** | 453 hPa (339.8 mm Hg) |
| · **Density at 20 °C (68 °F)** | 1.33 g/cm³ (11.09885 lbs/gal) |
| · **Relative density** | Not applicable. |
| · **Vapor density** | Not applicable. |
| · **Evaporation rate** | Not applicable. |
| · **Solubility in / Miscibility with** | |
| **Water:** | Not miscible or difficult to mix. |

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· **Partition coefficient (n-octanol/water):** Not applicable.

· **Viscosity:**
**Dynamic:** Not applicable.
**Kinematic:** Not applicable.

· **Solvent content:**
**Organic solvents:** 99.9 %
**VOC content:** 0.00 %

**Solids content:** 0.0 %

· **Other information** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**75-09-2 dichloromethane**

| | | |
|---|---|---|
| Oral | LD50 | 1,600 mg/kg (rat) |
| Inhalative | LC50/4 h | 88 mg/l (rat) |

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

| | | |
|---|---|---|
| 75-09-2 | dichloromethane | 2A |
| 55-18-5 | diethylnitrosoamine | 2A |
| 62-75-9 | dimethylnitrosoamine | 2A |
| 100-75-4 | 1-nitrosopiperidine | 2B |
| 621-64-7 | nitrosodipropylamine | 2B |
| 924-16-3 | N-nitrosodibutylamine | 2B |
| 930-55-2 | 1-nitrosopyrrolidine | 2B |
| 10595-95-6 | N-Nitrosomethylethylamine | 2B |

· **NTP (National Toxicology Program)**

| | | |
|---|---|---|
| 75-09-2 | dichloromethane | R |
| 55-18-5 | diethylnitrosoamine | R |
| 62-75-9 | dimethylnitrosoamine | R |
| 100-75-4 | 1-nitrosopiperidine | R |
| 621-64-7 | nitrosodipropylamine | R |
| 924-16-3 | N-nitrosodibutylamine | R |
| 930-55-2 | 1-nitrosopyrrolidine | R |

· **OSHA-Ca (Occupational Safety & Health Administration)**

| | |
|---|---|
| 75-09-2 | dichloromethane |
| 62-75-9 | dimethylnitrosoamine |

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## 12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

| | |
|---|---|
| · **UN-Number** | |
| · **DOT, ADR, IMDG, IATA** | UN1593 |
| · **UN proper shipping name** | |
| · **DOT** | Dichloromethane |
| · **ADR** | 1593 DICHLOROMETHANE |
| · **IMDG, IATA** | DICHLOROMETHANE |
| · **Transport hazard class(es)** | |
| · **DOT** |   |
| · **Class** | 6.1 Toxic substances |
| · **Label** | 6.1 |
| · **ADR, IMDG, IATA** |   |
| · **Class** | 6.1 Toxic substances |
| · **Label** | 6.1 |
| · **Packing group** | |
| · **DOT, ADR, IMDG, IATA** | III |
| · **Environmental hazards:** | Not applicable. |
| · **Special precautions for user** | Warning: Toxic substances |
| · **Hazard identification number (Kemler code):** | 60 |
| · **EMS Number:** | F-A,S-B |
| · **Segregation groups** | (SGG1) Acids |
| · **Stowage Category** | B |
| · **Stowage Code** | SW2 Clear of living quarters. |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |

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· **Transport/Additional information:**

· **ADR**
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **IMDG**
· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":** UN 1593 DICHLOROMETHANE, 6.1, III

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 313 (Specific toxic chemical listings):**

| | |
|---|---|
| 75-09-2 | dichloromethane |
| 55-18-5 | diethylnitrosoamine |
| 62-75-9 | dimethylnitrosoamine |
| 100-75-4 | 1-nitrosopiperidine |
| 621-64-7 | nitrosodipropylamine |
| 924-16-3 | N-nitrosodibutylamine |

· **TSCA (Toxic Substances Control Act):**
This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

| | | |
|---|---|---|
| 75-09-2 | dichloromethane | ACTIVE |
| 55-18-5 | diethylnitrosoamine | ACTIVE |
| 62-75-9 | dimethylnitrosoamine | ACTIVE |
| 100-75-4 | 1-nitrosopiperidine | ACTIVE |
| 621-64-7 | nitrosodipropylamine | ACTIVE |
| 924-16-3 | N-nitrosodibutylamine | ACTIVE |
| 930-55-2 | 1-nitrosopyrrolidine | ACTIVE |

· **Hazardous Air Pollutants**

| | |
|---|---|
| 75-09-2 | dichloromethane |
| 62-75-9 | dimethylnitrosoamine |

· **Proposition 65**

· **Chemicals known to cause cancer:**
All ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

| | | |
|---|---|---|
| 75-09-2 | dichloromethane | L |
| 55-18-5 | diethylnitrosoamine | B2 |
| 62-75-9 | dimethylnitrosoamine | B2 |
| 621-64-7 | nitrosodipropylamine | B2 |
| 924-16-3 | N-nitrosodibutylamine | B2 |
| 930-55-2 | 1-nitrosopyrrolidine | B2 |
| 10595-95-6 | N-Nitrosomethylethylamine | B2 |

· **TLV (Threshold Limit Value)**

| | | |
|---|---|---|
| 75-09-2 | dichloromethane | A3 |
| 62-75-9 | dimethylnitrosoamine | A3 |

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| · NIOSH-Ca (National Institute for Occupational Safety and Health) | |
|---|---|
| 75-09-2 | dichloromethane |
| 62-75-9 | dimethylnitrosoamine |

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
dichloromethane
dimethylnitrosoamine
nitrosodipropylamine
· **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H350 May cause cancer.
H336 May cause drowsiness or dizziness.
· **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P330 Rinse mouth.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department
· **Contact:**
Spex CertiPrep, LLC.
1-732-549-7144
· **Date of preparation / last revision** 04/14/2025 / -
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit

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*Acute Toxicity - Oral 4: Acute toxicity – Category 4*
*Skin Irritation 2: Skin corrosion/irritation – Category 2*
*Carcinogenicity 1B: Carcinogenicity – Category 1B*
*Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3*