

## Safety Data Sheet

acc. to OSHA HCS

Printing date 04/13/2017

Reviewed on 04/13/2017

**1 Identification**

- **Product identifier**
- **Trade name:** Nuvia™ Ni-Charged IMAC Resin
- **Catalog or product number:**  
10041819, 7800801, 7800802, 10041105, 10041104, 7800810, 7800800, 10041821, 10041822, 10041823, 10041824, 10041825, 10040887, 12003233, 12002782, 12004035
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547 (510)741-1000
- **Information department:** lsg\_techserv\_us@bio-rad.com
- **Emergency telephone number:**  
1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.  
510-741-1000

**2 Hazard(s) identification**

- **Classification of the substance or mixture**  
Flam. Liq. 3 H226 Flammable liquid and vapor.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**  
H226 Flammable liquid and vapor.
- **Precautionary statements**  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P240 Ground/bond container and receiving equipment.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:** Contact with acids may cause release of toxic gases
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

# Safety Data Sheet

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Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 1)

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

- **Listing of dangerous and non-hazardous components:**

|         |         |                                      |        |
|---------|---------|--------------------------------------|--------|
| 64-17-5 | ethanol | Flam. Liq. 2, H225<br>Carc. 1A, H350 | 10-20% |
|---------|---------|--------------------------------------|--------|

- **Additional information** For the wording of the listed risk phrases refer to section 15.

## 4 First-aid measures

- **Description of first aid measures**
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting and call for medical help.
- **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**  
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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** Wear protective clothing.
- **Environmental precautions:**  
Dilute with plenty of water.  
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).
- **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:**

|         |         |           |
|---------|---------|-----------|
| 64-17-5 | ethanol | 1,800 ppm |
|---------|---------|-----------|

- **PAC-2:**

|         |         |           |
|---------|---------|-----------|
| 64-17-5 | ethanol | 3300* ppm |
|---------|---------|-----------|

(Contd. on page 3)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 04/13/2017

Reviewed on 04/13/2017

Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 2)

· **PAC-3:**

64-17-5 ethanol

15000\* ppm

**7 Handling and storage**

- **Handling**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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 item 7.

· **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**64-17-5 ethanol**

|     |   |
|-----|---|
| PEL | Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm  |
| REL | Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm  |
| TLV | Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm |

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**

· **General Information**· **Appearance:**

|               |            |
|---------------|------------|
| <b>Form:</b>  | Liquid     |
| <b>Color:</b> | Light blue |
| <b>Odor:</b>  | Odorless   |

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/13/2017

Reviewed on 04/13/2017

Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 3)

|  |  |
|--|--|
| · <b>Odor threshold:</b>   | Not determined.  |
| · <b>pH-value at 20 °C:</b>  | 7  |
| · <b>Change in condition</b><br><b>Melting point/Melting range:</b><br><b>Boiling point/Boiling range:</b> | undetermined<br>undetermined   |
| · <b>Flash point:</b>  | 23 - 60 °C   |
| · <b>Flammability (solid, gaseous)</b>   | Not applicable.  |
| · <b>Ignition temperature:</b>   | 425 °C   |
| · <b>Decomposition temperature:</b>  | Not determined.  |
| · <b>Auto igniting:</b>  | Product is not selfigniting.   |
| · <b>Danger of explosion:</b>  | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| · <b>Explosion limits:</b><br><b>Lower:</b><br><b>Upper:</b>   | 3.5 Vol %<br>15.0 Vol %  |
| · <b>Vapor pressure at 20 °C:</b>  | 59 hPa   |
| · <b>Density:</b><br>· <b>Relative density</b><br>· <b>Vapor density</b><br>· <b>Evaporation rate</b>      | Not determined<br>Not determined.<br>Not determined.<br>Not determined.                    |
| · <b>Solubility in / Miscibility with</b><br><b>Water:</b>   | Not miscible or difficult to mix   |
| · <b>Partition coefficient (n-octanol/water):</b>  | Not determined.  |
| · <b>Viscosity:</b><br><b>dynamic:</b><br><b>kinematic:</b>  | Not determined.<br>Not determined.   |
| · <b>Solvent content:</b><br><b>Organic solvents:</b><br><b>Water:</b>                                     | 11.0 %<br>82.0 %   |
| <b>Solids content:</b><br>· <b>Other information</b>   | 7.0 %<br>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.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/13/2017

Reviewed on 04/13/2017

Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 4)

· **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

· **Information on toxicological effects**· **Acute toxicity:**· **LD/LC50 values for hazardous components per OSHA criteria:**

### 64-17-5 ethanol

|            |          |                  |
|------------|----------|------------------|
| Oral       | LD50     | 7060 mg/kg (rat) |
| Inhalative | LC50/4 h | 20000 mg/l (rat) |

· **Primary irritant effect:**· **on the skin:** No irritant effect.· **on the eye:** Irritant effect.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

64-17-5 ethanol

1

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

## 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 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **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** Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/13/2017

Reviewed on 04/13/2017

Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

|  |  |
|--|--|
| · <b>UN-Number</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>  | UN1170   |
| · <b>UN proper shipping name</b>   |  |
| · <b>DOT</b>   | Ethanol mixture  |
| · <b>ADR</b>   | 1170 ETHANOL (ETHYL ALCOHOL) mixture   |
| · <b>IMDG</b>  | ETHANOL (ETHYL ALCOHOL) mixture  |
| · <b>IATA</b>  | ETHANOL mixture  |
| · <b>Transport hazard class(es)</b>  |  |
| · <b>DOT, ADR, IMDG, IATA</b>  |  |
| · <b>Class</b>   | 3 Flammable liquids  |
| · <b>Label</b>   | 3  |
| · <b>Packing group</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>  | III  |
| · <b>Environmental hazards:</b>  | Not applicable.  |
| · <b>Special precautions for user</b>  | Warning: Flammable liquids   |
| · <b>Danger code (Kemler):</b>   | 30   |
| · <b>EMS Number:</b>   | F-E,S-D  |
| · <b>Stowage Category</b>  | A  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| · <b>DOT</b>   |  |
| · <b>Quantity limitations</b>  | Void<br>Void   |
| · <b>ADR</b>   |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>  |  |
| · <b>Limited quantities (LQ)</b>   | 5L   |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>  | UN 1170 ETHANOL MIXTURE, 3, III  |

US

(Contd. on page 7)

# Safety Data Sheet

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Reviewed on 04/13/2017

Trade name: Nuvia™ Ni-Charged IMAC Resin

(Contd. of page 6)

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

- Section 313 (40CFR372.65):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

64-17-5 ethanol

7732-18-5 water

- California Proposition 65:

- Developmental Toxicity

64-17-5 ethanol

- Carcinogenic categories

- EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

64-17-5 ethanol

A3

- MAK (German Maximum Workplace Concentration)

64-17-5 ethanol

5

- NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- National regulations

- Technical instructions (air):

| Class | Share in % |
|-------|------------|
| NK    | 10-20      |

- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

- 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: Environmental Health and Safety.

- Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- Date of preparation / last revision 04/13/2017 / -

(Contd. on page 8)

US

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(Contd. of page 7)

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

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

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Carc. 1A: Carcinogenicity – Category 1A