



# SAFETY DATA SHEET

according to Regulation (EU) 2015/830

Page 1/7

## C Binder for Neoloy E investment

Revision 0  
Revision date 2020-10-21

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name** C Binder for Neoloy E investment

#### 1.3. Details of the supplier of the safety data sheet

**Company** Ransom & Randolph  
**Address** 3535 Briarfield Boulevard, PO Box 1570  
Maumee, Ohio 43537 USA  
**Web** www.ransom-randolph.com  
**Telephone** +1 (419) 865-9497  
**Fax** +1 (419) 865-9997  
**Email** RR.SDS@dentsply.com  
**Email address of the competent person** RR.SDS@dentsply.com

#### 1.4. Emergency telephone number

**Emergency telephone number** USA +1 419 865 9497  
**Company** Ransom & Randolph Co.  
08:00-17:00 (US Eastern Std. / GMT minus 5)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**2.1.2. Classification - EC 1272/2008** STOT RE 2: H373;

#### 2.2. Label elements

**Hazard pictograms**



**Signal Word**

Warning

**Hazard Statement**

STOT RE 2: H373 - May cause damage to organs kidneys through prolonged or repeated exposure ingestion.

**Precautionary Statement: Prevention**

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

**Precautionary Statement: Response**

P314 - Get medical advice/attention if you feel unwell.

**Precautionary Statement: Disposal**

P501 - Dispose of contents/container to local and national regulations

#### 2.3. Other hazards

**Other hazards**

Amorphous silica may be converted to crystalline silica (cristobalite) when subjected to very high temperatures (1700° F). Exposure to respirable crystalline silica may cause lung disease.

## C Binder for Neoloy E investment

Revision 0

Revision date 2020-10-21

## 2.3. Other hazards

PBT and vPvB assessment. Not applicable.

## SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

## EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
ethylene glycol solution (Ethane-1,2-diol particulate)		107-21-1	203-473-3		1 - 10%	Acute Tox. 4: H302; STOT RE 2: H373;

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash off immediately with plenty of soap and water. Seek medical attention if irritation or symptoms persist. Wash contaminated clothing before reuse.
Ingestion	IF SWALLOWED: Call a POISON CENTER/doctor/ 800.222.1222 /if you feel unwell. DO NOT INDUCE VOMITING.

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

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	May cause irritation to skin and eyes.
Skin contact	Avoid prolonged or repeated exposure.
Ingestion	HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE.

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

Ingestion	If swallowed, seek medical advice immediately and show this container or label. CONTAINS MATERIAL WHICH MAY CAUSE kidneys DAMAGE (BASED ON ANIMAL DATA).
-----------	--

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Use as appropriate: Carbon dioxide (CO2), Dry chemical, Foam.

## 5.2. Special hazards arising from the substance or mixture

Burning produces irritating, toxic and obnoxious fumes.

## 5.3. Advice for firefighters

Self-contained breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin. Ensure adequate ventilation of the working area. Wear suitable protective equipment.

## 6.2. Environmental precautions

Do not allow product to enter drains. Prevent further spillage if safe.

## 6.3. Methods and material for containment and cleaning up

Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

## C Binder for Neoloy E investment

Revision 0

Revision date 2020-10-21

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Do NOT reuse empty containers.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

**7.3. Specific end use(s)**

Restricted to professional users.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****8.1.1. Exposure Limit Values**

ethylene glycol solution (Ethane-1,2-diol particulate)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
ethylene glycol solution (Ethane-1,2-diol vapour)	WEL 8-hr limit ppm: 20	WEL 8-hr limit mg/m3: 52
	WEL 15 min limit ppm: 40	WEL 15 min limit mg/m3: 104
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -

**8.2. Exposure controls**

<b>8.2.1. Appropriate engineering controls</b>	Ensure adequate ventilation of the working area.
<b>8.2.2. Individual protection measures</b>	Wear chemical protective clothing.
<b>Eye / face protection</b>	Approved safety goggles.
<b>Skin protection - Handprotection</b>	Chemical resistant gloves (PVC).
<b>Respiratory protection</b>	Self-contained breathing apparatus. Wear protective clothing.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

## C Binder for Neoloy E investment

Revision 0  
Revision date 2020-10-21

## 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Colourless
<b>Odour</b>	Odourless
<b>Odour threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point</b>	No data available
<b>Freezing Point</b>	Not required
<b>Initial boiling point</b>	= 100 °C
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Fat Solubility</b>	Not applicable.
<b>Partition coefficient</b>	Not applicable.
<b>Autoignition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available
<b>Solubility</b>	Soluble in water

## 9.2. Other information

<b>Conductivity</b>	Not applicable.
<b>Surface tension</b>	Not applicable.
<b>Specific gravity</b>	= 1.25
<b>Gas group</b>	Not applicable.
<b>Benzene Content</b>	Not applicable.
<b>Lead content</b>	Not applicable.
<b>VOC (Volatile organic compounds)</b>	Not applicable.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

	Not applicable.
--	-----------------

## 10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

## 10.3. Possibility of hazardous reactions

	ethylene glycol CAS 107-21-1. mixing water and acids must be supervised, due to large amounts of heat produced.
--	---

## 10.4. Conditions to avoid

	Avoid sparks, flames, heat and sources of ignition. Direct sunlight.
--	--

## 10.5. Incompatible materials

	Avoid contact with: Acids, Bases, Oxidising agents.
--	---

## 10.6. Hazardous decomposition products

	Hazardous decomposition products. Carbon dioxide (CO <sub>2</sub> ). VOC (Volatile organic compounds). may be formed in fire conditions.
--	--

## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

--	--

## C Binder for Neoloy E investment

Revision 0  
Revision date 2020-10-21

## 11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	Eyes: Contact may cause irritation with redness and tearing.
Respiratory or skin sensitisation	No sensitization effects reported.
Carcinogenicity	Based on available data, the classification criteria are not met.
Repeated or prolonged exposure	Inhalation is irritating to the respiratory tract and may cause damage to the central nervous system.  (POSSIBLE) BIRTH DEFECT HAZARD - (CONTAINS MATERIAL THAT) MAY CAUSE BIRTH DEFECTS (BASED ON ANIMAL DATA). ethylene glycol CAS 107-21-1.

## 11.1.4. Toxicological Information

	Ingestion may cause nausea and vomiting. May cause irritation to mucous membranes. May cause drowsiness or dizziness. May cause damage to liver and kidneys.  Acute inhalation - Systemic effects. May cause irritation to mucous membranes. May cause irritation to respiratory system. May cause dizziness and headache.
--	--

## 11.1.12. Mixture versus substance information

	ethylene glycol CAS 107-21-1. Inhalation Rat LC50/4 h = > 200mg/m3. Dermal Rabbit LD50 = >3500 mg/kg. Oral Rat LD50 = 50-7712 mg/kg.
--	--

**SECTION 12: Ecological information**

## 12.2. Persistence and degradability

	Readily biodegradable.
--	------------------------

## 12.3. Bioaccumulative potential

## Partition coefficient

	C Binder for Neoloy E investment Not applicable.
--	--

## 12.4. Mobility in soil

	ethylene glycol CAS 107-21-1. high.
--	-------------------------------------

## 12.5. Results of PBT and vPvB assessment

	Not required.
--	---------------

## Toxicity (T-):

	ethylene glycol CAS 107-21-1. Daphnia EC50/48h = 46300 mg/l. Algae EC50/72h = 6500 - 13000 mg/l. Fathead minnows LC50/96h = 49000 to 57000 mg/L.
--	--

## 12.6. Other adverse effects

	not expected.
--	---------------

**SECTION 13: Disposal considerations**

## General information

	Dispose of in compliance with all local and national regulations.
--	---

## Disposal of packaging

	Containers must be recycled in compliance with national legislation and environmental regulations.
--	--

**SECTION 14: Transport information**

## 14.1. UN number

	The product is not classified as dangerous for carriage.
--	--

## 14.2. UN proper shipping name

## C Binder for Neoloy E investment

Revision 0  
Revision date 2020-10-21

## 14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

## 14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

## 14.4. Packing group

The product is not classified as dangerous for carriage.

## 14.5. Environmental hazards

The product is not classified as dangerous for carriage.

## 14.6. Special precautions for user

The product is not classified as dangerous for carriage.

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The product is not classified as dangerous for carriage.

**SECTION 15: Regulatory information**

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

## Regulations

U.S. FEDERAL REGULATIONS: C Binder for Neoloy E Investment

CERCLA 103 Reportable Quantity: RQ for C Binder for Neoloy E investment is 50,000 pounds based on a RQ of 5000 pounds or Ethylene Glycol 1-10%. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Chronic health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Ethylene Glycol CAS 107-21-1 1-10%.

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U.S. STATE REGULATIONS

California Proposition 65: This product can expose you to chemicals including Ethylene Glycol, which is known to the State of California to birth defects and other reproductive harm. For more information go to [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov).

INTERNATIONAL REGULATIONS:

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).

European Inventory of New and Existing Chemicals Substances (EINECS): All of the components in this product are listed on the EINECS inventory.

## 15.2. Chemical safety assessment

No data is available on this product.

**SECTION 16: Other information**

## Other information

## Text of Hazard Statements in Section 3

Acute Tox. 4: H302 - Harmful if swallowed.  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure .

# C Binder for Neoloy E investment

Revision 0

Revision date 2020-10-21

---

**Further information**

---

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.</p>
--	---

---