



# SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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## All Purpose Protective Coat

Revision 0  
Revision date 2020-10-28

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

#### 1.1. Product identifier

Product name All Purpose Protective Coat

#### 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	Carc. 1A: H350; STOT RE 1: H372;
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#### 2.2. Label elements

Hazard pictograms	This substance / mixture has been classified in accordance with the US Federal OSHA Hazard Communication Standard 29CFR 1910.1200. Substance concentration band-ranges are presented, and minor ingredient composition maybe withheld, to protect trade secrets.
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Signal Word	Danger
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Hazard Statement	Carc. 1A: H350 - May cause cancer inhalation. STOT RE 1: H372 - Causes damage to organs (lungs) through prolonged or repeated exposure inhalation.
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Precautionary Statement: Prevention	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash (hands) thoroughly after handling. P270 - Do no eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
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## 2.2. Label elements

Precautionary Statement: Response	P285 - In case of inadequate ventilation wear respiratory protection.
	P308+P313 - IF exposed or concerned: Get medical advice/attention. P314 - Get medical advice/attention if you feel unwell.
	P405 - Store locked up.
Precautionary Statement: Storage	P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to local and national regulations

## 2.3. Other hazards

Other hazards	This material contains trace amounts of naturally occurring uranium, thorium, and radium.
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## Further information

	Product contains respirable crystalline silica (RCS).
	Not applicable. PBT and vPvB assessment.

## 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
quartz > 10 % USA		14808-60-7	238-878-4		50 - 60%	Carc. 1A: H350; STOT RE 1: H372;
sodium silicate		1344-09-8	215-687-4		1 - 10%	Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;
glycerin (Glycerol, mist)		56-81-5	200-289-5		1 - 10%	
Ammonia solution	007-001-01-2	1336-21-6	215-647-6		0.5 - 1%	Skin Corr. 1B: H314; Aquatic Acute 1: H400;

## Further information

	Full text for all Risk Phrases mentioned in this section are displayed in Section 16.
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## SECTION 4: First aid measures

## 4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. 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	Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

Inhalation	Seek medical attention if irritation or symptoms persist.
Eye contact	Seek medical attention if irritation or symptoms persist.
Skin contact	Seek medical attention if irritation or symptoms persist.
Ingestion	Seek medical attention if irritation or symptoms persist.

## SECTION 5: Firefighting measures

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## 5.1. Extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

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

Burning produces irritating, toxic and obnoxious fumes.

## 5.3. Advice for firefighters

Wear suitable respiratory equipment when necessary.

## SECTION 6: Accidental release measures

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

Avoid raising dust. 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. Use appropriate container to avoid environmental contamination.

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

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

### 6.4. Reference to other sections

See section [2, 8 & 13] for further information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid formation of dust. Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing. Do not eat, drink or smoke in areas where this product is used or stored. Wash hands after handling the product.

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

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

### 7.3. Specific end use(s)

Restricted to professional users.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

exposure limits: Ammonium Hydroxide (as ammonia) - 25 ppm TWA OSHA PEL, 35 ppm STEL ACGIH TLV.  
 exposure limits: glycerin - 5 mg/kg TWA OSHA PEL (respirable fraction), 15 mg/kg TWA OSHA PEL (total dust).  
 all respirable crystalline silica - sum of all types - quartz + cristobalite TWA PEL OSHA (respirable fraction) 0.050 mg/m<sup>3</sup>  
 Action Level OSHA (respirable fraction) 0.025 mg/m<sup>3</sup>.  
 exposure limits - Zirconium compounds , 10 mg/m<sup>3</sup> STEL ACGIH (respirable fraction)  
 5 mg/m<sup>3</sup> TWA OSHA PEL, 5 mg/m<sup>3</sup> TWA ACGIH TLV.

#### 8.1.1. Exposure Limit Values

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## 8.1.1. Exposure Limit Values

glycerin (Glycerol, mist)	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:

## 8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Wear:.. Suitable respiratory equipment.
8.2.3. Environmental exposure controls	Use appropriate container to avoid environmental contamination.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	White/Cloudy
Odour	Ammoniacal
Odour threshold	Not applicable.
pH	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Relative density	1.79 (H2O = 1 @ 20 °C)
Fat Solubility	Not applicable.
Partition coefficient	No data available
Autoignition temperature	Not applicable.
Viscosity	Not applicable.
Explosive properties	Not determined
Solubility	Miscible in water

## 9.2. Other information

Conductivity	Not applicable.
Surface tension	Not applicable.
Gas group	Not applicable.
Benzene Content	Not applicable.
Lead content	Not applicable.
VOC (Volatile organic compounds)	Not applicable.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

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<b>10.1. Reactivity</b>	
	Not applicable.
<b>10.2. Chemical stability</b>	
	Stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	
	Avoid contact with: Most common metals, forms. hydrogen gas.
<b>10.4. Conditions to avoid</b>	
	Heat. Direct sunlight.
<b>10.5. Incompatible materials</b>	
	most common metals. Acids. Oxidising agents.
<b>10.6. Hazardous decomposition products</b>	
	Carbon dioxide (CO <sub>2</sub> ).
	Hazardous Decomposition Products (silica): Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride. Reaction with water or acids generates heat.
	Hazardous Decomposition Products (Zircon): Zirconium silicate will disassociate to Zirconium Dioxide (ZrO <sub>2</sub> ) and Silicon dioxide (SiO <sub>2</sub> ) when heated above 1540 degrees Celsius. Hazardous Polymerization: Will not occur.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	Irritant, moderate eye. May cause irritation to skin, eyes and mucous membranes. Ingestion causes burns to the respiratory tract. May cause irritation to mucous membranes.
<b>Skin corrosion/irritation</b>	Irritating to eyes and skin.
<b>Respiratory or skin sensitisation</b>	No sensitization effects reported.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Known Human Carcinogens (Category 1).
<b>Reproductive toxicity</b>	No data available.
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT-repeated exposure</b>	<p>Chronic effects</p> <p>Prolonged inhalation of respirable crystalline silica</p> <p>In 1997, the International Agency for Research on Cancer (IARC) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibers, 1997, Vol. 68, IARC, Lyon, France). In June 2003, the European Commission's Scientific Committee for Occupational Exposure Limits (SCOEL) concluded:</p> <p>"that the main effect in humans of the inhalation of respirable crystalline silica is silicosis. There is sufficient information to conclude that the relative lung cancer risk is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk. Since a clear threshold for silicosis development cannot be identified, any reduction of exposure will reduce the risk of silicosis."</p> <p>(SCOEL SUM Doc 94-final on respirable crystalline silica, June 2003)</p> <p>There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see Section 16).</p>

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## 11.1. Information on toxicological effects

	This product contains [ zirconium dioxide CAS 1314-23-4 ] which contains trace quantities of naturally occurring radioactive uranium and thorium (130 to 145 Picocuries/gram). Overexposure to respirable dust containing radioactive materials may cause lung cancer. Zirconium dioxide has been reported to cause lung granulomas.
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## 11.1.4. Toxicological Information

glycerin	Inhalation Rat LC50/>570 h: 1	Oral Rat LD50: 12600 mg/kg
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## 11.1.12. Mixture versus substance information

	glycerin. Inhalation Rat LC50/>570 h = 1. sodium silicate. Oral Rat LD50 = 1960 mg/kg. sodium 2-ethylhexyl sulfate. Oral Rat LD50 = 4000mg/kg.
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## SECTION 12: Ecological information

## 12.1. Toxicity

glycerin	Daphnia EC50/48h: 10000 mg/l	Fish LC50/96h: 10000.0000 mg/l
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## 12.2. Persistence and degradability

	glycerin is. Readily biodegradable.
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## 12.3. Bioaccumulative potential

	glycerin is not expected to bioconcentrate in fish and aquatic organisms.
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## Partition coefficient

	All Purpose Protective Coat No data available
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## 12.4. Mobility in soil

	glycerin. very high mobility in soils.
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## 12.5. Results of PBT and vPvB assessment

	Not applicable.
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## 12.6. Other adverse effects

	none known.
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## SECTION 13: Disposal considerations

## General information

	Dispose of in compliance with all local and national regulations.
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## SECTION 14: Transport information

## 14.1. UN number

	The product is not classified as dangerous for carriage.
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## 14.2. UN proper shipping name

	The product is not classified as dangerous for carriage.
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## 14.3. Transport hazard class(es)

	The product is not classified as dangerous for carriage.
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## 14.4. Packing group

	The product is not classified as dangerous for carriage.
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## 14.5. Environmental hazards

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## 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.

## Further information

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

<b>Regulations</b>	<p>U.S. FEDERAL REGULATIONS: All Purpose Protective Coat</p> <p>CERCLA 103 Reportable Quantity: All Purpose Protective Coat has a RQ of 10,000 pounds based RQ for Ammonium Hydroxide of &lt; 1%. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.</p> <p>SARA TITLE III: Hazard Category For Section 311/312: see Section 2</p> <p>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): none</p> <p>Section 302 Extremely Hazardous Substances (TPQ): None</p> <p>EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.</p> <p>U.S. STATE REGULATIONS California Proposition 65: WARNING This product can expose you to chemical including quartz, which is known to the State of California to cause cancer. For more information, go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.</p> <p>INTERNATIONAL REGULATIONS: Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).</p> <p>European Inventory of New and Existing Chemicals Substances (EINECS): All of the components in this product are listed on the EINECS inventory.</p>
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### 15.2. Chemical safety assessment

No data is available on this product.

## SECTION 16: Other information

### Other information

<b>Text of Hazard Statements in Section 3</b>	<p>Carc. 1A: H350 - May cause cancer .</p> <p>STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure .</p> <p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>STOT SE 3: H335 - May cause respiratory irritation.</p> <p>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.</p> <p>Aquatic Acute 1: H400 - Very toxic to aquatic life.</p>
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### Further information

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**Further information**

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	<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>
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