



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Matrixcote (R) concentrate

Revision 1
Revision date 2017-03-14

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

1.1. Product identifier

Product name	Matrixcote (R) concentrate
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Description	Foundry material.
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1.3. Details of the supplier of the safety data sheet

Company	Ransom & Randolph
Address	3535 Briarfield Boulevard, Maumee, OH 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. 07:30 to 16:30 (Eastern Std. / GMT minus 5)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xi; R43 Symbols: Xi: Irritant.
Main hazards	May cause sensitisation by skin contact.
2.1.2. Classification - EC 1272/2008	Skin Sens. 1: H317;

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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2.2. Label elements

Signal Word	Warning
Hazard Statement	Skin Sens. 1: H317 - May cause an allergic skin reaction.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of water/ . P321 - Specific treatment (see on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to local and national regulations

Further information

	Not applicable. PBT and vPvB assessment.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	613-114-00-6	4719-04-4	225-208-0	01-0000000000-04	0 - 0.5%	Xn; R22 R43	
Ethanolamine (2-Aminoethanol)	603-030-00-8	141-43-5	205-483-3	01-0000000000-04	0 - 0.5%	Xn; R20/21/22 C; R34	

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	613-114-00-6	4719-04-4	225-208-0	01-0000000000-04	0 - 0.5%	Acute Tox. 4: H302; Skin Sens. 1: H317;	

Further information

	01-0000000000-04 exempt, under Biocide Products Regulation, BPR rule.
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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 if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water.
Skin contact	Remove all contaminated clothes and footwear immediately unless stuck to skin. Rinse immediately with plenty of water.
Ingestion	Drink 1 to 2 glasses of water. If swallowed, rinse mouth with water (only if the person is conscious).

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause sensitisation by skin contact.
Ingestion	May cause irritation to mucous membranes.

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.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
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5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
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5.3. Advice for firefighters

	Self-contained breathing apparatus. Wear suitable protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Wear suitable protective equipment.
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6.2. Environmental precautions

	Do not allow product to enter drains.
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6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Transfer to suitable, labelled container.
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6.4. Reference to other sections

	See section [2, 8 & 13] for further information.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Wash hands after handling the product.
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7.2. Conditions for safe storage, including any incompatibilities

	Do NOT allow to freeze. Keep in a cool, dry, well ventilated area. Keep containers tightly closed.
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7.3. Specific end use(s)

	Foundry material.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

	Ensure adequate ventilation of the working area.
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8.1.1. Exposure Limit Values


Ethanolamine (2-Aminoethanol)	WEL 8-hr limit ppm: 1	WEL 8-hr limit mg/m3: 2.5
	WEL 15 min limit ppm: 3	WEL 15 min limit mg/m3: 7.6
	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

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8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Apron (Plastic or rubber).
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Wear suitable gloves.
Respiratory protection	Suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Off white
Odour	Slight
Freezing Point	0 °C
Initial boiling point	100 °C
Vapour pressure	2260 Pa
Vapour density	1
Relative density	1 - 1.005 (H2O = 1 @ 20 °C)
pH	7 - 8
Viscosity	No data available
Partition coefficient	No data available
Fat Solubility	Not applicable.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.
Melting point	Not applicable.
Autoignition temperature	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Solubility	Miscible in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
VOC (Volatile organic compounds)	Not applicable.
Benzene Content	Not applicable.
Lead content	Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

	Not applicable.
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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No Significant Hazard.

10.4. Conditions to avoid

Direct sunlight. Do NOT allow to freeze.

10.5. Incompatible materials

Sodium chloride.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	No data is available on this product.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause sensitisation by skin contact.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Repeated or prolonged exposure	May cause irritation to skin.

11.1.4. Toxicological Information

Matrixcote (R) concentrate	Oral Rat LD50: >2000 mg/kg
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SECTION 12: Ecological information

12.1. Toxicity

Matrixcote (R) concentrate	Algae EC50/72h: >100
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12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

Does not bioaccumulate.

Partition coefficient

Matrixcote (R) concentrate No data available

12.4. Mobility in soil

Not determined.

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12.5. Results of PBT and vPvB assessment

	Not applicable.
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12.6. Other adverse effects

	Not applicable.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

	Dispose of in compliance with all. local and national regulations.
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Disposal methods

	Contact a licensed waste disposal company.
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Disposal of packaging

	Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.
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Further information

	For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.
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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

	The product is not classified as dangerous for carriage.
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14.6. Special precautions for user

	The product is not classified as dangerous for carriage.
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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.
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Further information

	The product is not classified as dangerous for carriage.
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SECTION 15: Regulatory information

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

Regulations	<p>U.S. FEDERAL REGULATIONS:</p> <p>CERCLA 103 Reportable Quantity: Matrixcote concentrate may be subject to CERCLA reporting requirements. CAS 1336-21-6 Ammonium Hydroxide. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.</p> <p>SARA TITLE III:</p>
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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

	<p>Hazard Category For Section 311/312: Acute health</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): CAS 1336-21-6 Ammonium Hydroxide.</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</p> <p>California Proposition 65: This product contains substance(s) known to the State of California to cause cancer: none</p> <p>INTERNATIONAL REGULATIONS:</p> <p>Canadian WHMIS Classification: Class D Division 2B (Toxic materials causing other chronic effects)</p> <p>Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).</p>
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15.2. Chemical safety assessment

	No data is available on this product.
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SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas: 15 - Regulations.
Text of risk phrases in Section 3	R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed. R22 - Harmful if swallowed. R34 - Causes burns. R43 - May cause sensitisation by skin contact.
Text of Hazard Statements in Section 3	Acute Tox. 4: H302 - Harmful if swallowed. Skin Sens. 1: H317 - May cause an allergic skin reaction.

Further information

	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.
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