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1. Product and company identification

1.1 Identification of the substance or preparation:

Commercial product name: Spectra FX Copper Patina/ Blue Emerald

Product group: Pigment

Use of substance / preparation: Industrial paints

1.2 Company/undertaking identification:

Emergency telephone no. (24h):

Manufacturer/distributor: Alsa Corporation

1213 E. 58th Place Los Angeles, CA 90001

USA

Tel(323) 581-5200 Fax (323) 589-4400

website www.alsacorp.com 800-535-5053 / 352-323-3500

This MSDS was prepared by the Product Safety Department of The Alsa Corporation

2 Composition/information on ingredients

Chemical characterization (substance):

Chemical characteristics

Modified polyacrylate (CAS-No. 228863-31-8)

Information on ingredients:

This material does not contain any hazardous substances at or above OSHA and WHMIS reportable levels.

3 Hazards Identification

3.1 Hazards classifications

HMIS® rating (product as packaged):

Health: 0 Fire: 1 Reactivity: 0 PPE: E

Note: Respiratory protection is only recommended in the event that ventilation or engineering controls are unable to maintain exposures below recommended levels; or in the event of a spill or other emergency response situation. Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association.

Canadian WHMIS classification: None.

3.2 Emergency overview and potential hazards

This material is not hazardous under OSHA criteria. This material is not hazardous under WHMIS criteria.

Physical Hazards:

Nuisance dust.

Acute health effects:

Route of entry or possible contact:

eyes, skin, inhalation, ingestion

Eye Contact:

Slight irritation by mechanical effects can not be excluded.

Skin Contact:

No toxic effects are known.

Inhalation:

No toxic effects are known.

Ingestion:

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Not expected in industrial use.

Additional information on acute health effects:

none

3.3 Further information:

Chronic health effects:

None known. A long term exposure exceeding TLV can lead to damaging effect as a result of mechanical overloading of the respiratory tract.

Medical conditions which may be aggravated by exposure:

unknown

Carcinogens/Reproductive toxins:

There are no carcinogenic ingredients present at or over 0.1% in this material. This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels.

See Section 11 for Toxicological Information, if any.

4 First-aid measures

4.1 General information:

In cases of sickness seek medical advice (show label if possible).

4.2 After inhalation:

If inhaled, remove to fresh air.

4.3 After contact with the skin:

If contact with skin, wash skin with plenty of water or with water and soap. Get medical attention if symptoms occur.

4.4 After contact with the eyes:

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Get medical attention if irritation occurs.

4.5 After swallowing:

No special measures required. Get medical attention if symptoms occur. Designate the product.

5 Fire-fighting measures

5.1 Flammable properties: Method

5.2 Fire and explosion hazards:

Dust may form explosive mixture with air. Electrostatic charging is possible.

5.3 Recommended extinguishing media:

water-spray jet, carbon dioxide, dry chemical or foam-type extinguishing media

5.4 Unsuitable extinguishing media:

sharp water jet

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

6 Accidental release measures

6.1 Precautions:

Avoid dust formation.

6.2 Containment:

Cover any spilled material in accordance with regulations to prevent dispersal by wind.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up:

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Take up mechanically and dispose of according to local/state/federal regulations. Clean up with plenty of water.

6.4 Further information:

Eliminate all sources of ignition.

7 Handling and storage

7.1 Handling

Precautions for safe handling:

Avoid dust formation.

Precautions against fire and explosion:

The product is a combustible organic dust and under special conditions dust explosion is possible (german dust explosion class 2, KSt 200 - 300 bar m s-1). These special conditions are sufficient oxygen and dust concentration, sufficient ignition energy and temperature. During transfusion electrostatic charging possible. Take precautionary measures against electrostatic charging. Take precautionary measures against dust explosion.

7.2 Storage

Conditions for storage rooms and vessels:

Advice for storage of incompatible materials:

Further information for storage:

Keep container dry and tightly closed. Store in a dry and cool place.

Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use only with adequate ventilation.

Local exhaust:

Not necessary . In case of dust formation: yes .

8.2 Associate substances with specific control parameters such as limit values

Threshold limit values (TLV):

CAS No.	Material	Туре	mg/m3	ppm	Dust fract.
	Particulates not otherwise classified	OSHA PEL	15.0		Inhalable dust
	Particulates not otherwise classified	OSHA PEL	5.0		Respirable dust
	Particulates not otherwise classified	ACGIH TWA	10.0		Inhalable dust
	Particulates not otherwise classified	ACGIH TWA	3.0		Respirable dust

Re Particulates not otherwise classified: The value is for particulate matter containing no asbestos and < 1% crystalline silica (ACGIH).

8.3 Personal protection equipment (PPE)

Respiratory protection:

In case of dust formation use a NIOSH approved respirator for: nuisance dust .

Hand protection:

Recommendation: rubber gloves.

Eye protection:

Recommendation: chemical safety goggles. Recommendation in case of dust formation: tight fitting chemical safety goggles.

Other protective clothing or equipment:

Recommendation: protective clothing.

8.4 General hygiene and protection measures:

Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

9 Physical and chemical properties

9.1 A	ppearance
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Physical state / form....: solid - powder
Color....: colourless - yellowish
Odor...: slight

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9.2 Safety parameters Method

Vapour pressure...... not applicable

Bulk density.....: 500 - 600 kg/m³ Water solubility / miscibility.....: virtually insoluble

Solubility in organic solvent.....: < 10 g/ in Tetrahydrofuran pH-Value...... approx. 7 at 20 °C (68 °F) Distribut. coeff. n-octanol/water...: not applicable

Viscosity (dynamic)...... not applicable

9.3 Further information

Thermal decomposition...... $> 300 \, ^{\circ}\text{C} \, (> 572 \, ^{\circ}\text{F})$

10 Stability and reactivity

10.1 Conditions to avoid:

none known.

10.2 Materials to avoid:

none known.

10.3 Hazardous decomposition products:

none known.

10.4 Further information:

Hazardous polymerization cannot occur.

11 Toxicological information

11.1 General information:

Toxicological testing has been conducted with this material.

11.2 Toxicological data:

Reference points for mutagenic (carcinogenic) potential:

Test system	Effect	Source
Bacterial Reverse Mutation Test	not mutagenic	test report

12 Ecological information

12.1 Information on elimination (persistence and degradability)

Further information:

Easily separable from water by filtration.

12.2 Behaviour in environmental compartments

Further information:

12.3 Ecotoxicological effects:

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

Can be removed mechanically from waste water.

12.4 Further ecological information

General information:

Product not investigated. No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable.

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13 Disposal considerations

13.1 Product disposal

Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of in a domestic waste incinerator. Observe local/state/federal regulations.

13.2 Packaging diposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation...... Not Regulated

14.2 Transport by sea IMDG-Code

Valuation...... Not Regulated

14.3 Air transport ICAO-TI/IATA-DGR

Valuation...... Not Regulated

15 Regulatory information

15.1 U.S. Federal regulations

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

15.2 U.S. State regulations

This material contains no substances at or above the reportable levels which are listed on one of the following lists: SARA Title III Section 302 Extremely Hazarous substances, SARA Title III Section 313 Toxic Chemicals, National Toxicology Program (NTP) Annual Report Carcinogens, International Agency for Research on Cancer (IARC) Human Carcinogens (Group 1, 2A, or 2B), OSHA Highly Hazardous Chemicals, California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) Substances (Carcinogens / Reproductive toxins), Massachusetts Substance List, New Jersey Right To Know Hazardous Substance List, Pennsylvania Hazardous Substance List.

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None.

DSL Status:

This material or one or more of its components is not listed on the Canadian Domestic Substances List.

Non-DSL Chemicals:

CAS-No	Chemical	Upper limit wt. %
228863-31-8	Modified Polymethacrylate	100 0

Canadian Ingredient Disclosure List

Canadian Ingredient Disclosure List:

This material contains no listed components. Hinweise

15.4 Other international regulations

EU Risk Phrases:

R-Phrase	Description
R-	

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EU Safety Phrases:

S-Phrase	Description
S-	-

Details of international registration status

Listed on teh following inventories:

ECL - Korea

16 Other information

16.1 Additional information:

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This MSDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental

Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-seconds

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

Flash point determination methods

ASTM D56 ASTM D92, DIN 51376, ISO 2592 ASTM D93, DIN 51758, ISO 2719

ASTM D3278, DIN 55680, ISO 3679

DIN 51755

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

WHMIS - Canadian Workplace Hazardous Materials

Identification System

Common name

Tagliabue (Tag) closed cup Cleveland open cup

Pensky-Martens closed cup

Setaflash or Rapid closed cup

Abel-Pensky closed cup

16.3 Conversion table:

Pressure: 1 hPa*0.75 = 1 mm Hg; 1 bar = 1 hPa

Pressure: 1 hPa * 0.75 = 1 mm Hg = 1 Torr; 1 bar = 1000 hPa

Viscosity: 1 mPa*s = 1 Centipoise (Cp) Viscosity: 1 mPa*s = 1 Centipoise (Cp)

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